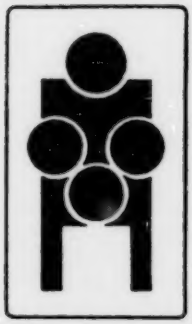

THE McCREARY CENTRE SOCIETY

C/O SUNNY HILL HOSPITAL FOR CHILDREN • (604) 433-3491
3644 SLOCAN STREET, VANCOUVER, B.C. V5M 3E8 FAX 435-1452

THE PROVINCIAL TASK FORCE
EATING DISORDER REPORT
VOLUME I

Prepared for the Ministry of Health

By

McCreary Centre Society
3644 Slocan Street
Vancouver, BC V5M 3E8

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Executive Summary

In the past decade the people of British Columbia appear to have become more conscious of diet, weight, and fitness. This trend has been associated with an increase in the prevalence of anorexia nervosa and bulimia, as well as greater concern for the problem of obesity. There are no reliable data on how many thousands of British Columbians suffer from one or other type of eating disorder, but mall surveys demonstrate that as many as one in six young women and one in fourteen men may be seriously afflicted.

Patients with these disorders annually consume the equivalent of a 50 bed acute care hospital ward and generate many thousands of outpatient visits to physicians, dietitians, psychologists, social workers and other treatment resources. Nevertheless, there is no shortage of testimonials from sufferers and their families that proper care is difficult to find. The few professionals and treatment programs in the field readily admit that they cannot meet the need for care, and they express frustration with the uneven distribution of services in the province.

In March 1989, the McCreary Centre Society, in contract with the Ministry of Health, struck the Eating Disorder Task Force (EDTF) to examine the problem of eating disorders and to offer recommendations for meeting the needs of this patient population. The task force has concluded that:

1. eating disorders occur in all regions of the province;

2. there has been a recent increase in the size of the caseload in B.C. (numbered in the thousands);

3. obesity and bulimia are the most prevalent forms of eating disorders, but anorexia nervosa and its subtypes are particularly common in younger age groups;

4. eating disorders are a chronic illness that, without early intervention, may extend over many years;

5. treatment resources for sufferers and their families do not meet the needs and are unevenly distributed within the province.

The task force has enunciated a set of principles to guide the development of services for this patient population and has proposed a three-stage implementation process. The principles include:

1. emphasis on outpatient, multidisciplinary treatment programs;

2. a network of regional and provincial treatment centres;

3. development of specialized treatment resources for specific groups such as children and adolescents;

4. encouragement of innovative programs that provide alternatives to hospitalization in acute care facilities;

5. facilitation of self-help programs;

6. promotion of healthy eating and development of eating disorder prevention programs;

7. expansion of research and education programs for eating disorders.

The task force believes that implementation of the proposed program can be effected in three stages spread over the next five years. The program will require new operating funds and some new capital funds. However, early emphasis on local self-help and support groups, regional treatment centres, alternatives to hospitalization, health promotion, and prevention of eating disorders should enable a more efficient use of treatment resources in subsequent years.

The urgency of the eating disorder problem in B.C. warrants coordinated action by government, the community, and the helping professions. Sufferers and their families require improved access to more locally based and more comprehensive care than is currently available to them. New efforts to meet their needs will strengthen their ability to successfully cope with their problem and enable them to lead more normal lives.

The task force urges the Ministry of Health to set up immediately a provincial coordinating body to work on the guidelines and budget preparation for the proposed provincial and regional treatment centres. Every effort should be made to ensure that the existing treatment, support, and self-help resources are preserved and enhanced during the period of time that it takes to implement the proposed framework.

Eating Disorders - The Silent Epidemic

Introduction

Those who have an eating disorder tend to suffer in silence. Despite the pain and stress that the sufferers and their families endure, they resist putting a public face to their very private struggle. Anorexics quietly starve themselves, bulimics binge and purge in private, and the morbidly obese become reclusive. The families of these individuals do not band together and advocate on behalf of their children.

Many popular myths surround the problem. Eating disorders are seen as conditions of the affluent, though in reality they affect all social classes, both sexes, and most age groups. Sufferers are sometimes misconstrued as having insignificant problems that are self-imposed. To believe these types of myths is to be blind to the seriousness and compulsive nature of eating disorders.

> "Many of these children with eating disorders will be and can be a great asset to our future if they receive the help they so desperately need in time. The society of today, as we have made it, is very much responsible for their illness, and we have a duty to right our errors to the utmost. It seems ironic that while we put young people into this chaotic world, we turn our backs at a time when we are most needed."
>
> - a father

Societal prejudice about fat and eating behaviour contribute to the shame that many patients feel. These are medical conditions which require professional treatment, not bad habits which are cured by the exercise of will-power. The patient is not responsible for having the condition but is responsible for promoting their own health by having treatment. What the citizens of B.C. need is more accessible treatment and education to diminish the shame and prejudice associated with eating disorders.

It is reasonably argued that current fashions, media hype, and even some government-sponsored health promotion campaigns have produced unrealistic and idealized notions about weight, fitness, and body shape. These notions are thought to be an important driving force behind the current "Thin is in" attitude. This attitude and the value that most individuals place on their physical appearance has played a role in the current epidemic of eating disorders (1).

Historical Perspective

Disordered eating behaviour has been described throughout the history of mankind (2). Gull, in the 1600s, was the first to describe the syndrome that we now know as anorexia nervosa.

Over the intervening years various authors have added to the descriptive and speculative literature on eating disorders, but it was not until the mid 1900s that we began to develop a fuller understanding of the disorder. The work of Keys on the effects of starvation on human volunteers and that of Bruch on the psychiatric manifestations of disturbed body image brought new focus to the subject (3-5). More recently, clinicians like Russell and Fairburn have documented the bulimic component of the spectrum of eating disorders (6-8). These advances in our knowledge and understanding have served to heighten professional awareness of, and interest in, the problem area. This interest is evidenced in the burgeoning number of scientific journals, international conferences, and special research groups devoted to the subject of eating disorders. The current perception is that western society is in the midst of an epidemic of eating disorders. How much of this is due to recent expansion in professional interest in the problem and how much is due to a true increase in incidence remains controversial (9-12).

Nature of Eating Disorders

It is clear is that our understanding of the nature of these disorders is evolving. Often eating disorders are thought of as self-inflicted conditions or the result of a disturbed family life. These simplistic explanations do not fit with current understanding of the problem. Contemporary understanding is that we are dealing with a multifactorial or multicausal phenomenon that is best understood within a biopsychosocial framework (1,13-15).

> "But if I lick my finger, turn the page of the book and put my finger in my mouth again, I'll get more calories that way!"
>
> - a 15-year-old at the start of a six year struggle with anorexia nervosa

There is growing recognition that the term "eating disorder" encompasses a continuum of disordered eating behaviour. Three syndromes comprise the eating disorder continuum.

Anorexia Nervosa: These individuals compulsively lose weight, become emaciated, and are preoccupied with their disturbed eating behaviours. Psychological and behavioral disturbances are also present and they may attempt to avoid treatment. Early recognition and treatment is particularly effective but if allowed to continue the condition causes serious medical dangers and death (16).

Bulimia Nervosa: These individuals develop a compulsion to engage in secretive eating binges and purges. Their lives are dominated by repetitive episodes of disordered eating, compulsive vomiting, and an obsessional dependence on dangerous purgative drugs. They suffer serious medical and psychological problems

and are socially impaired. They may have co-existing psychiatric disorders but can usually be treated on an outpatient basis (17).

Morbid Obesity: These individuals are severely overweight and suffer serious medical and social impairment as a consequence. Their treatment involves behavioral, medical, and sometimes surgical intervention, usually on a long-term outpatient basis (18-20).

The literature describes the eating disorder syndromes and recognizes that there are a number of atypical combinations of symptoms (21-29). In discussing the eating disorder continuum it is important to differentiate serious impairment from less severe forms of unhealthy eating. This report focuses on the more severe forms of eating disorders but recognizes the need for a broad community emphasis on healthy eating, moderate exercise, promoting positive self-image, and enhancing self-esteem.

> I have been bulimic for five years and over the course of these years have sought many treatments for my condition. I have spent considerable time in psychiatric hospitals and have participated in several mental health programs. Frustration and disappointment have been all too familiar feelings in my quest for recovery.
>
> - an adult sufferer

The goals of treatment of eating disorders are variously described in the literature, but essentially they are:

1. to allow normal psychosocial development and functioning to occur and to decrease the level of social dysfunction (1,14,26)
2. to ensure adequate, regular nutrition (27-29)
3. to prevent medical and psychiatric complications and avoid chronicity (15,18,30,31)

In order to achieve these goals most programs find that it is necessary to:

1. help sufferers restore a more normal weight and eating behaviour (27,28,32,33)
2. correct medical or nutritional complications (24-40)
3. improve psychosocial problems including distortion of body image (1,41,42)
4. modify cognitive distortions about food, fat, weight (43-46)
5. enable partners and families to understand and effectively cope with a sufferer (47-51).

The approach to treatment of eating disorders is usually described as multidisciplinary in nature, developmentally focused, and stresses a more appropriate lifestyle.

Scope of the Problem

Eating disorders are believed to be exceedingly common in British Columbia. This section of the report discusses the B.C. situation from a traditional epidemiologic perspective and progresses from a discussion of what we know about mortality and disability to speculation about levels of resource utilization.

> "No one knows that hopeless, helpless feeling of seeing a beautiful young person deteriorate before one's very eyes, unless they have lived through that experience..."
>
> - a brother

Mortality

Eating disorders can, if untreated, be life-threatening. Even with treatment there is significant mortality associated with the various types of eating disorder (19,36-40,52-59). Research in countries with good longitudinal data on their eating-disordered populations, e.g., Sweden and Denmark, suggests that overall lifetime mortality rates may be as high as 17% (10,53,60-62). These premature deaths may be due to: the effects of prolonged starvation and a chronic low weight state, cardiac failure or arrythmia, suicide, or the various mishaps that occur in the course of binge or purge behaviours. Because of the nature of these deaths, they may not be reliably reported as being due to an eating disorder. (This would be particularly true of suicide where a psychological autopsy has not been undertaken).

It seems reasonable to challenge existing national and provincial mortality statistics for eating disorders as the cause of death. A review of Vital Statistics data for our province showed that only a few residents of B.C. are listed as having an eating disorder as the major cause of their death.

Prevalence

It is presently estimated that 1% of schoolgirls have anorexia nervosa, 10% have obesity, and 10% are bulimic (10,98,99). While estimates of prevalence do vary, the majority of authors seem to agree that the prevalence of anorexia nervosa and bulimia nervosa has increased in recent years (9). For example, the incidence of anorexia nervosa is reported to have risen from 1.6 to 4.1 per 100,000 in the last two decades (12,96,97).

A recent theme issue of the B.C. Medical Journal included a paper on the epidemiology of eating disorders (63). In that article Tonkin and Wigmore reported on three recent (but in some ways contradictory) studies of prevalence of eating disorders in B.C. The Nutrition Committee of the B.C.M.A. reported the size of the known eating disorder caseload in B.C. as

being 1387 cases. A survey of physicians in the Boundary Health Unit provided prevalence estimates of 33.75 per 100,000 population for anorexia nervosa and 32.3 cases per 100,000 for bulimia. A mall survey undertaken in 1988 found that 4.3% of respondents revealed a lifetime history of an eating disorder.

> So many young women are developing eating disorders these days, its tragic. I started it to lose weight and now its become a dreadful habit that I turn to every day for comfort, but it makes me feel awful. What frustrates me most is wanting to be better being obsessed with food at the same time. That's where I think professionals can help - to be there when we are ready to work at getting better and to reinforce the positive in ourselves and our lives.
>
> - an adult sufferer

The results of the various EDTF surveys are reported in detail in Volume II. The data confirm:

1. the province-wide distribution of the caseload
2. the shortage of treatment resources
3. the high prevalence of obesity and bulimia
4. the substantial prevalence of anorexia nervosa
5. the female preponderance in eating disorders

The 1989 EDTF mall surveys found that 16% of respondents met the clinical criteria for a diagnosable eating disorder. The majority of cases involved females, with obesity and/or bulimia being the most prevalent. Low-weight eating disorders accounted for 26% of the reported cases and a prevalence of 4% in the overall respondent group (Table 1).

Table 1
EDTF Mall Survey Responses
Total number of respondents = 1041

	Both Sexes		Females Only	
	No.	%	No.	%
Anorexia Nervosa	20	2	20	2
Anorexia Nervosa/ Bulimia Nervosa	23	2	23	2
Bulimia	52	5	49	5
Bulimia + Obesity	10	1	10	1
Obesity	59	6	49	5
TOTAL	164	16	149	15

These data provided estimates that are higher than previously reported for B.C. This may reflect increased prevalence but may also be an artefact of the mall survey approach. While mall surveys are epidemiologically flawed, the sample size, the fact that the same method was used in each region surveyed, and the strict diagnostic criteria applied enable some conclusions to be drawn.

Table 2

EDTF Mall Survey Responses
Percentage of normal and eating disordered subjects reporting diet and exercise for weight control.

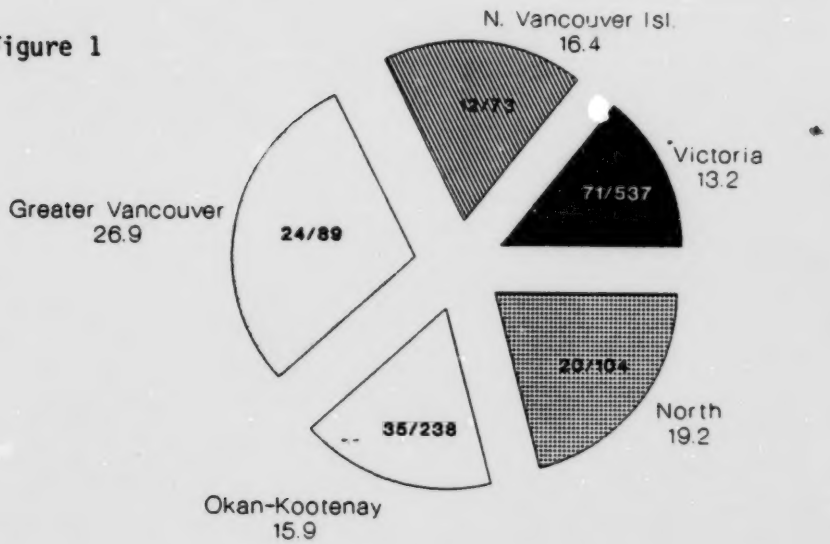
	% Dieting	% Exercising
Normal	30.8	28.4
Anorexic	40.0	30.0
Bulimic	67.3	53.8
Obese	80.7	33.3
Obese-Bulimic	100.0	80.0
Bulimic-Anorexic	82.6	56.5

Almost a third of normal respondents reported persistent dieting, and 28% reported vigorous exercising for weight control purposes (Table 2). These findings reinforce how common the preoccupation with diet and weight is even in non-eating-disordered populations in B.C. These practices are even more prevalent among the eating-disordered response group. A closer examination of the data for mean weights, BMI, and behaviour reveals a pattern that closely resembles the clinical picture for each type of eating disorder described in the literature (Vol II Table 8) (21,22,64,65).

The duration of the eating disorder and age of onset also fits the pattern found in the literature, i.e., younger age of onset of low weight types (66) and longer duration for those with obesity (Vol II Table 9) (20). The frequency of binge eating and/or purge behaviours reported by those with an eating disorder varied according to the type of eating disorder. For example, purge behaviour ranged from 1.7 times per month in anorexics to 5.2 times per month in obese bulimics (Vol II Fig 2). The eating-disordered respondents reside in all regions of the province. As might be expected, the number of diagnosable cases is higher in Greater Vancouver than elsewhere (Fig 1).

Fig. 1 - Percentage of Total Reported ED for Each Region in Mall Survey

Figure 1



Adjusted for Differences in Sample Size

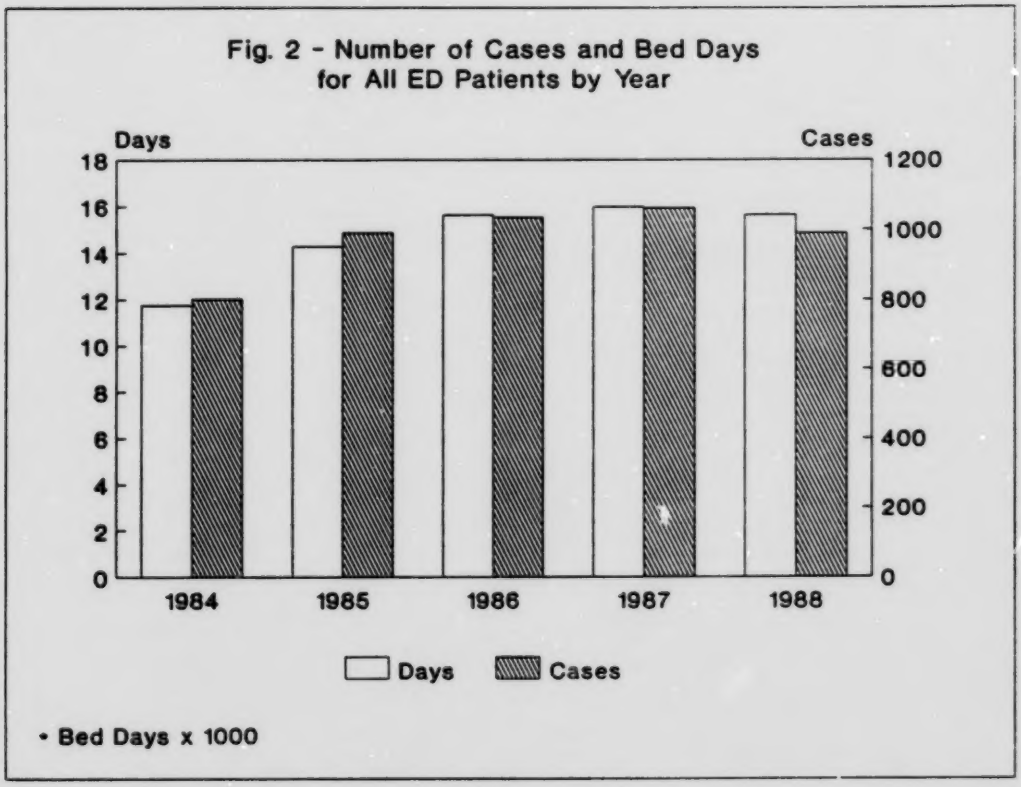
Utilization of Resources

The EDTF mall survey found that 6 of every 10 anorexics and only 14% of bulimics reported receiving care (Vol II Table 32). Individuals with a combination of bulimia with anorexia or obesity received care in 74% and 50% of cases respectively. The family physicians in B.C. reported attempting to refer 58% of their anorexics, 40% of their bulimics, and 33% of their obese patients(Vol II Table 26). They were most likely to make a referral to dietitians (46% of cases) or psychiatrists (42% of cases). Far fewer cases were referred to an eating disorder clinic, a mental health unit, or a psychologist (Vol II Table 27).

Data from respondents to a survey of B.C. Dietitians and Nutritionists show at least 25 (6%) dietitians provided care to at least 415 individuals with eating disorders (anorexia 29%, bulimia 39%, morbid obesity 32%) over the past 12 months. Responding dietitians reported an average waiting list of 4 weeks (0 to 10 weeks) for an initial assessment, inadequate time for follow-up counselling and few opportunities to establish interdisciplinary client support.

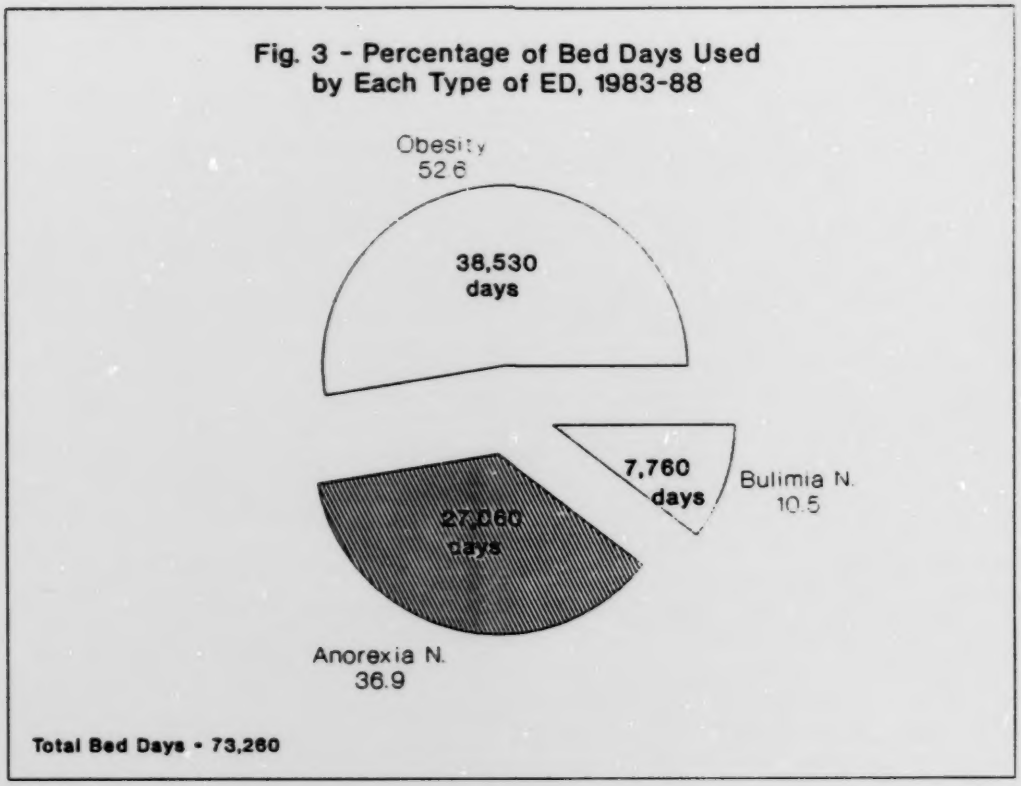
Hospital utilization data demonstrated a modest increase in cases (32%) and bed days (44%) between 1983 and 1987 but a slight decline in 1988 (Figure 2).

Figure 2



There were more than 1,000 hospital separations in 1987 in which the diagnosis was one or other type of eating disorder. This group of patients consumed 16,000 bed days in 1987 - about the equivalent of a 50 bed ward at an 85% occupancy rate. The majority of these hospital separations were with a diagnosis of obesity, but anorexia nervosa with 17% of cases consumed 38% of the bed days (Figure 3). Almost half of the eating-disorder separations and bed days consumed occurred in the Greater Vancouver Regional Hospital District and 19% of the cases were under 19 years of age.

Figure 3



The Youth Clinic at B.C. Children's Hospital, which treats the majority of new cases of eating disorders in children and adolescents, provides some data on changing demand over the last decade. The new patient case load at the B.C. Children's Hospital Youth Clinic has doubled every three-year period over the last nine years. Intake of each new Youth Clinic patient consumes a minimum of six hours of professional time. In other words the annual (initial assessment) workload has risen from 30 hours in the early 1980s to roughly 300 hours in the late 1980s. In addition, treatment and follow-up of eating-disordered adolescents at B.C. Children's Hospital generated about 1,000 outpatient visits and used 821 tertiary care hospital bed days in 1988.

The adult eating-disorder caseload includes an indeterminate number of chronic cases. Some of these cases are anorexic and some severely bulimic, while others are morbidly obese. Those patients who attend clinics or private practitioners become heavy users of the health care resources. However, it is believed that a substantial proportion of chronic cases remain untreated and often unrecognized. It is likely (though there is no sound epidemiologic data to

base an opinion on) that these chronic sufferers are socially isolated and highly dependent on family and/or social welfare support systems.

Outline of Existing Resources

The treatment resources available to sufferers and their families are largely located in the Lower Mainland. These include the university teaching hospital programs at University Hospital - UBC Site, St. Paul's Hospital, and B.C. Children's Hospital. However, these are partial programs in various stages of development. In addition there is a well-developed program based in the Kelowna General Hospital. The program at B.C. Children's Hospital is the only one based in a medical-surgical unit while the others are in adult or general psychiatric units. The Greater Vancouver Mental Health Service operates a 10 bed rehabilitation residence for women with psychiatric disorders. This facility accepts one or two patients with eating disorders who require ongoing supervision and psychosocial rehabilitation.

A small number of private practitioners and private treatment groups in the Lower Mainland have a special interest in eating disorders. There are also practitioners, usually psychiatrists but occasionally psychologists, social workers, or dietitians scattered throughout the province who will accept eating-disordered patients but who do not have a special interest in the area. In addition, there are a few experienced but less formally trained individuals who accept eating-disordered clients.

In recent months the Community Mental Health Centres outside of Vancouver have begun to offer a limited range of services to individuals and families with eating disorders. These new services have been implemented after a set of inservice education activities developed by the Fraser Valley/North Shore Region, Provincial Mental Health Services. In some instances this has involved individual counselling, but in the majority of regions it has been through the development of professionally led support groups. In addition, the Youth Clinic at B.C. Children's Hospital has a parent support group that is professionally led.

A number of local or regional groups have become active in the development of a response to locally perceived need. There are interdisciplinary interagency committees at work in Duncan, Prince George, Victoria, and Kelowna. A number of these groups have participated in the EDTF activities or at least submitted a brief (Appendix E).

Professionals have also become more active advocates on behalf of the needs of their patient populations. The treatment teams at

> We are a group of individuals struggling to overcome our common illness and between us we have tried every possible treatment available in the Victoria area with little success.
>
> While the ANAD group does offer support and an arena to share our successes, failures, and problems, it is not enough. We need a treatment centre. We need a residential treatment centre for people in the acute stage of their illness and that centre could also provide outpatient services for those of us with varying degrees of recovery.

St. Paul's Hospital, University Hospital - UBC, B.C. Children's Hospital -Youth Clinic, and Kelowna General Hospital have each developed proposals to expand their existing programs. The dietitians and nutritionists in the province have submitted a detailed brief outlining their ideas about needs and priorities, especially as they apply to prevention.

The main support organization involved with eating disordered individuals and/or their families or partners in B.C. is the Association of Anorexia Nervosa and Associated Disorders (ANAD). This organization offers information services, provides guidance on where to seek care, and runs regular, professionally led group meetings. It is essentially a Vancouver-based activity, but regional chapters are being established.

The total number of inpatient beds in B.C. specifically allocated to the treatment of sufferers is less than twenty, and the number of physicians working in established programs is seven. The non-physician professional component is estimated to be (excluding nursing staff on inpatient units) seven nurse clinicians, six psychologists, five dietitians, and three social workers. Most of these physicians and other health professionals do not work full time with eating disordered patients.

The geographic distribution of treatment resources and the actual number of professionals actively engaged in treating patients with eating disorders in B.C. is clearly inadequate to meet the existing needs. Closing-off of new patient intake in some programs or long waiting lists in others occurs frequently and reflects the fact that clinicians cannot meet the demand for service generated by the increased prevalence and the increased acuity of these conditions. The situation is further aggravated by the number of previously silent cases (especially of bulimia) that are, for the first time, seeking care.

Treatment Options

> "Because of the fine care my daughter received, she is now planning her future, instead of me laying flowers on her grave."
>
> - a mother

The treatment literature has largely emanated from highly specialized programs offered in a select number of world class centres. Many different forms of treatment of eating disorders have been undertaken. Program evaluation or outcome studies that are credible and comparable are limited in number(53,60-62,67-71). A number of innovative programs have begun to be reported. These include alternatives to hospitalization (72-75), use of different treatment modalities (25,30,44,48,76-79), and development of self-help and/or support groups (80-82). These newer approaches have largely focused on bulimia and, to a lesser extent, anorexia nervosa. Surgical approaches to the treatment of obesity have received considerable attention, but the literature also reflects the substantial interest in the non-surgical or behavioral management of this patient group (20,75).

In general, treatment is most effective when delivered in a two-pronged approach that addresses the disordered eating behaviour as well as the psychosocial aspects of the disorder (100,101). The likelihood of full recovery is excellent in individuals receiving proper treatment during the early stages of an eating disorder. Treatment, which is often lengthy becomes more difficult as the length of illness or duration prior to treatment increases.

The literature supports the belief that some therapy is better than no therapy and that no single therapeutic approach has the definitive answer to the problems of any of the various types of eating disorder (20,62,68,70,71). Various of therapeutic modalities or disciplines have a useful role to play in each of the types of eating disorder, e.g., nutrition counselling, psychotherapy, or pharmacological treatment.

The therapeutic options can be listed according to type of approach or discipline involved:

1. renutrition and nutrition counselling +/- hospitalization
2. medical management and surgical intervention in extreme cases
3. behaviour modification, cognitive restructuring, art therapy
4. psychotherapy, family work, group therapy, support groups

Not all therapeutic approaches work equally well with every type of eating problem. For example, antidepressants have a proven role in bulimia but have no demonstrable value in the treatment of anorexia nervosa (83-86). A number of newer therapies appear to be efficacious but have yet to be fully evaluated, e.g., zinc therapy for anorexia nervosa (87,88). As yet there is no magic cure, nor is there a major therapeutic breakthrough on the horizon.

The service models currently being advocated by both professional and lay groups in the eating-disorder field feature concepts of comprehensiveness, multidisciplinary teams, and continuity of care. Current emphasis is upon development of outpatient and day care delivery systems with the prospect of limiting the need for additional inpatient beds. Continuity of care extends from crisis intervention programs (emergency room and/or short stay inpatient units, hot lines) through to community-based self-help and professionally led support groups.

Prevention Options

The EDTF discussions stressed the importance of preventing eating disorders and promoting healthier attitudes towards eating, weight, fat, etc. There were numerous articles that stressed the importance of prevention (89-92), but our review of the literature yielded few references in which actual prevention programs were described (let alone evaluated) (93,94).

The Government of Canada recently released a discussion paper on weight-related issues. The document, entitled "Promoting Healthy Weights", provides an important framework for future efforts to prevent eating disorders. The following material excerpted from the publication "The Integrated Approach" describes the federal initiative.

"Promoting Healthy Weights" evolved into a strategic framework from an initial concern in 1984 about excess weight and its effect on health. The Task Force on the Treatment of Obesity was asked to prepare a report on the issues and approaches to the treatment of problems associated with excess weight. At the same time, the development of national weight standards was initiated. As the work progressed, the focus shifted from excess weight to recognition that there was a need to more clearly define the issues around both over and under weight and the potential for the prevention of problems. The result of the two-year problem-solving process which involved over 60 Canadians, nine background papers, a national planning meeting, six task force reports and numerous consultations was the "Promoting Healthy Weights: A Discussion Paper" and "Canadian Guidelines for Healthy Weights" released in October, 1988.

The "Promoting Healthy Weights: A Discussion Paper" was accepted as a strategic base for the Health Services and Promotion Branch. "Blueprint for Action: The Integrated Approach" is the program plan developed collaboratively by the Health Services and Promotion Branch and Fitness Canada to implement the strategic framework based on "Promoting Healthy Weights".

Mistaken Identity

Hello there,
Who are you behind the mask?
Tell me what's beyond the face
Reflected in the glass.

You seem so self-composed,
So sure of what you do.
But if your world came crashing down,
Would you fall with it too?

No one understands
The way you feel inside
They cannot understand
Why in them you won't confide.

You seem so independent,
So happy on your own.
But is it really what you want
To be forever all alone?

You want to be the perfect one
Who never commits a wrong.
But nothing that you ever do
Seems to be enough.

You cannot seem to please them,
No matter how you try.
And sometimes you feel so hopeless
You want to run and hide.

Why can't they see that what you're doing
Is not a suicide?
It's not because of sadness felt,
It's not because of pride.

Can't they see without this front
That you'd have nothing left -
Nothing to make you special
Or different from the rest.

So, really, who are you?
Who are you behind the mask?
Can you tell me what's beyond the face
Reflected in the glass?

L.H.

The working document "The Integrated Approach" identifies the following five key issues as having significant implication for health promotion strategy:

1. conflicting views requiring reconciliation among the epidemiological, physiological, and psycho-social approaches to the definition and outcome measures for health;

2. changing concerns about "weight" issues for specific groups during the life cycle and a lack of understanding of the influence of psychological, genetic, and behavioral factors on weight during the life cycle;

3. health consequences of weight problems and the need to interpret the concept of risk, to decrease pre-occupation with weight and negative body image, and to apply consistent standards;

4. misunderstandings about the concept of energy balance and the relationship of physical activity and problem eating habits;

5. current gaps in the prevention and treatment approaches with respect to the social forces that encourage weight problems, family influences, misconceptions about weight and the lack of success of traditional approaches.

Public misconceptions about the nature of eating disorders need to be addressed through public awareness programs. However, the EDTF believes that development of public awareness and prevention programs should be undertaken with caution and be accompanied by systematic evaluation. The rationale for this caution is the acknowledged imitative features of some forms of eating disorder. There is a legitimate concern that misinformation, sensationalism, or undue emphasis on disordered eating will promote an increase in the prevalence of conditions such as bulimia (95).

Utilization of existing health promotion resources particularly those provided by provincial community nutritionists should be stressed, but more educational materials need to be developed. For example, the Ministry of Education could incorporate a unit on eating disorders and healthy eating into its current family life and new humanities health curriculum. The BCMA, working in conjunction with Sport B.C. and provincial community nutritionists, could develop an awareness program for high risk groups engaged in sports where weight criteria are a factor.

Producers of print and electronic media need to be sensitized to the pivotal role they can play in the genesis and prevention of eating disorders. Efforts should be made to reduce the sensationalism surrounding eating disorders and to remove the stigma that sufferers and their families experience. This would foster greater public acceptance of this condition and thereby reduce the social isolation that chronic sufferers encounter.

Proposal for a Provincial Framework

The Eating Disorder Task Force (EDTF) recognizes the provincial scope of this common problem and supports the community of sufferers and the dedicated group of health professionals in their plea for the development of new and better treatment resources for this underserved group of patients.

The EDTF recognizes that being overweight or underweight or engaging in disordered eating or purging behaviour is not an isolated nutritional phenomenon. It includes medical and psychologic dimensions. Because of the complex interactions between these various components of the problem, the EDTF stresses the need for a holistic approach that includes a range of services (prevention, crisis management, weight stabilization and eating normalization, counselling, family support, continuity of care, and follow-up).

The EDTF recognizes that the need for new treatment resources represents additional costs to the health care system. However, innovative outpatient and community residential programs offer the prospect of eventually lowering the number of hospital bed days consumed by this group of patients. This should affect the demand for construction of new acute care hospital beds and thereby reduce the nursing staff requirements in each region. Strong, imaginative prevention programs that will counter the current epidemic of eating disorders in B.C. offer potential of reducing the incidence of new cases and the prevalence of chronic cases.

The EDTF advocates an eating-disorder program based on the concept of provincial and regional centres in which exemplary care can be delivered by multidisciplinary treatment teams. Each centre will have the capacity to diagnose, treat, and offer continuity of care to patients and their families. Each centre will be responsible for ensuring that services are delivered in a cost-effective manner and that the programs developed are proven to be efficacious. These centres will also participate in the development of and delivery of programs that promote healthy eating, prevent the occurrence of disordered-eating behaviours, and enable self-help networks to be established.

Look at Me

Look at me;
bones protruding
through skin
appearing like
clothes on
a hanger.

Look at me;
refusing
to eat
exercising
all day
endless energy.

Look at me;
the world's
eighth wonder
to triumph
over desire
awesome.

Look at me;
only on
the outside
don't dare
to venture
within.

Look at me;
steering you
away from
the real problems
lying underneath
the facade.

M.S.

The EDTF proposes that two provincial treatment centres be established, one for children and adolescents and the other for adults. These centres would also serve as regional treatment centres for patients residing within Metropolitan Vancouver. They would provide treatment of complicated cases not manageable in the regional centres. The provincial treatment centres would serve as consultants to each region and would provide travelling teams that would serve a treatment, consultant, and education role in regions not yet served by a regional treatment team. These provincial centres would be university-affiliated programs based in tertiary care centres and would provide a research and teaching role in the area of eating disorders (Vol III; Appendix B).

The EDTF proposes that regional centres be established in each of five macroeconomic regions of the province. Each centre would have adequate resources available to offer treatment to patients with eating disorders residing in their area. Treatment should consist of a range of services provided by a team capable of working in both inpatient and outpatient settings. Where indicated, regional centre teams should offer a more locally based service delivered from satellite centres within their catchment area. Regional teams would provide leadership within the region by developing and providing healthy eating and eating disorder prevention programs (Vol III; Appendix B).

The EDTF believes that the budget for each regional centre should be locally controlled and should foster flexibility in programming and enable treatment to be offered in outpatient and non-institutional settings. It should include the capacity to purchase external services and to access outreach programs such as the U.B.C. - Psychiatry Outreach. Provision should be made for the development of self-help networks, support groups, and health promotion activities within each region.

The EDTF supports the concept that, whenever possible, new programs should be developed in harmony with existing resources. However, we believe that existing professional staff in each region who might be interested in assuming a role in the treatment of eating disorders cannot reasonably be expected to simply add services for eating-disordered individuals to their existing caseloads. Existing regional staff must first receive proper training, skill upgrading, and preparation for working with this group of patients and their families. Before programs are established in a regional centre, it is important that the public health, mental health, hospital, and private practitice constituencies be given an opportunity to define their potential and respective roles. Wherever practical, each program should represent an integrated approach to local services delivery.

The EDTF wishes to stress the importance of preventing chronicity and its associated morbidity and mortality. Early recognition of new cases and careful assessment in order to identify co-morbidity is an essential first step in any exemplary program. Each treatment program should include a rehabilitative component, and programs directed at children and adolescents should stress strengthening the family and enhancing their coping skills. Children and adolescents should be treated in a developmentally appropriate manner.

The EDTF encourages the development of provincially based research on eating disorders. This group of sufferers and their families have not proven to be easy subjects for research. However, there is a need for sound epidemiologic data on incidence and prevalence of each type of eating disorder in our own province. In addition each provincial and regional centre should be assisted in the establishment of systematic follow-up of cases and program evaluation. There is also a need to encourage scholarship in such fields as the clinical nutrition of eating disorders or the long-term physical, psychological, psychiatric, and social concomitants of chronic eating disorders.

Recommendations

Treatment

1.1 Treatment should be delivered primarily via community-based regional treatment teams each charged with providing services to a clearly defined catchment population. These teams should be hospital-affiliated and be provided with backup support from provincial centres which supply limited specialized services.

1.2 Each regional team should have the capacity to provide a full range of services to patients and families within the catchment area.

1.2.1 Regional teams should provide intensive outpatient treatment to children and adults within their catchment population.

1.2.2 Regional teams should consult to inpatient units within their catchment area to assist in the provision of inpatient treatment services.

1.2.3 Regional teams should consult to residential treatment facilities within their catchment area to assist in the provision of residential treatment.

1.2.4 Regional teams should provide a telephone hot-line service for health care professionals in the catchment region.

1.3 Each regional centre should be able to provide support services to communities within the regional catchment area.

1.3.1 A regional resources coordinator position should be developed in order to coordinate services and to ensure collaboration between hospital and community based services within the region.

1.3.2 The function of the resources coordinator would include: the coordination of hospital and community services, the facilitation of family and patient support groups, education of health care professionals, and affiliation with community schools.

1.3.3 Regional centres should provide partial hospitalization services (including day, evening, and night programs) to children and adults within their catchment population.

1.4 Each regional treatment team should be staffed by professionals from a range of health disciplines with clinical leadership provided by a physician.

1.4.1 The physician team-leader should have expertise in the area of eating disorders and should provide a link between community services and hospital treatment.

1.4.2 Teams should be staffed by professionals from the following health disciplines: Dietetics, Medicine, Nursing, Occupational Therapy, Physiotherapy, Psychology, and Social Work.

1.4.3 Sufficient numbers of designated staff with specific training in eating disorders should be allocated in order to compose an integrated multidisciplinary team.

1.5 Regional treatment teams should be developed in the following five macroeconomic regions: 1) The Fraser Valley - Lower Mainland, 2) Vancouver Island, 3) Okanagan-Kootenay regions, 4) Metropolitan Vancouver and 5) the North.

1.5.1 Regional treatment teams should be developed by adding to existing resources wherever possible.

1.5.2 Regional treatment teams should develop satellite treatment centres from which to provide locally based services within their region.

1.6 Provincial centres should be developed which provide specific services not available through regional treatment centres.

1.6.1 Provincial centres should provide specialized services for children, adolescents, and adults with complicated disorders which cannot be managed by regional teams.

1.6.2 Provincial centres should provide specialized treatment interventions unavailable elsewhere in the province (e.g., gastrointestinal surgery for morbid obesity).

1.6.3 Provincial centres should conduct eating-disorder research and program evaluations.

1.6.4 Provincial centres should provide consultative services to each regional centre.

1.6.5 Provincial centres should provide travelling treatment teams to areas of the province not yet served by a regional centre. The consultation, assessment, and treatment activities of the travelling team should be carried out in conjunction with local professional staff and should have a strong educational focus.

1.7 Provincial centres should be developed by adding resources to existing programs at university-affiliated centres.

1.7.1 A Provincial centre for the treatment of children and adolescents with eating disorders should be developed at either Sunny Hill Hospital or B.C. Children's Hospital.

1.7.2 A Provincial centre for the treatment of adults with eating disorders should be developed at either St. Paul's Hospital or University Hospital - UBC Site.

1.8 Specialized resources should be developed to meet the special needs of certain subgroups of patients with eating disorders.

1.8.1 Children and adolescents with eating disorders should be treated in a setting that is appropriate to their developmental needs.

1.8.2 Innovative treatment modalities for children and adolescents with eating disorders, such as summer treatment camps and care-by-parent units, should be explored.

1.8.3 Tertiary assessment services should be provided to young children (ages 12 and under) by a travelling team from the provincial child-adolescent treatment centre.

1.8.4 Appropriate treatment should be available to patients with morbid obesity.

1.8.5 Appropriate treatment should be available for patients with specific medical conditions (e.g., diabetes mellitus, cystic fibrosis, pregnancy) which become complicated by eating disorders.

1.8.6 Treatment services should be readily available for individuals in career or sport activities associated with a high incidence of eating disorders.

1.9 Residential facilities should be established to provide rehabilitative services for patients with eating disorders (Appendix D).

1.9.1 Each region should have access to a residential facility which is able to manage patients with eating disorders who require daily supervision.

1.9.2 For regions in which adequate need has been identified, 4 to 6 residential facilities which are specialized in the care of patients with eating disorders should be developed. Wherever possible, these facilities should provide separate accommodation for child/adolescent patients and for adults with major mental illness.

1.9.3 Residential facilities for patients with eating disorders should be staffed by individuals with adequate skills and training in the management of such patients.

1.9.4 Residential facilities should be affiliated with a regional treatment centre, and patient follow-up should be coordinated with the centre's treatment team.

Prevention and Education

2.1 The provincial coordinating body should establish a community information and education resource centre along lines similar to the National Eating Disorder Information Centre in Toronto.

2.1.1 The resource centre should have an inventory of all the eating disorder programs currently operating in British Columbia.

2.1.2 The resource centre should maintain resource materials on prevention, education, and treatment.

2.1.3 The resource centre should distribute information materials to each regional treatment centre.

2.1.4 The resource centre should be an information resource for students and faculty in the health professions.

2.1.5 The resource centre should facilitate the organization of conferences on eating disorders.

2.2 Regional teams should act as a resource for groups in their region who wish to develop prevention and education programs.

2.2.1 Regional teams should consult with those responsible for the education of teachers and counsellors in their region on the manner in which topics such as weight, eating habits and eating disorders should be taught in schools and colleges.

2.2.2 Regional teams should be a resource for support groups, families, etc.

2.3 A special effort should be made to educate the staff and clients of organizations involved with high risk populations (e.g., dance schools, modelling schools, fitness centres, competitive athletes, occupations centering on diet) on issues related to weight, body image, diet, and exercise.

Public Impact

3.1 The provincial coordinating body should initiate and carefully monitor a provincial program promoting eating disorder awareness and healthy eating.

3.2 An interministerial committee should be established to review food, weight, and exercise related programs within government agency programs and to monitor the application of eating disorder prevention strategies.

3.2.1 The committee should determine opportunities for promoting healthier eating behaviours and increasing awareness of eating disorders with staff and clients.

3.2.2 The committee should include representation from Health, Education, Social Services and Housing, Corrections, Labour, and Recreation.

3.3 The private media sector (print and electronic) should be encouraged to develop positively oriented public service information spots on healthy eating and exercise as well as on eating disorders.

3.4 The Open Learning Agency (Open College, Open University, and Knowledge Network) should be encouraged to become involved in development of a curriculum related to eating disorders (for lay and professional learners).

Self-Help

4.1 There should be a provincial non-profit organization whose mandate is to facilitate, coordinate and support the establishment of local self-help groups in each of the five regions of the Province.

4.2 The Association of Anorexia Nervosa and Associated Disorders (ANAD) should be recognized as an umbrella organization for local self-help groups in British Columbia.

4.2.1 The long-term goal of the umbrella organization (ANAD) should be to build a financially self-sufficient organization.

4.3 Funds should be provided to ANAD to cover the expenses for office space, secretarial support, educational materials, and a facilitator.

4.3.1 The facilitator must have sufficient resources to travel to local communities to encourage and support the establishment of local community organizations.

4.3.2 The facilitator should be capable of training other facilitators to lead local level self-help groups.

4.3.3 The facilitator should ensure that the self-help groups maintain close ties with designated treatment centres and all professionals in the community who are treating persons with eating disorders.

4.4 Each provincial and regional treatment centre should be associated with a self-help group.

4.5 There should be separate self-help groups for children-adolescents and adults. Inclusion in one of these groups should be based on the needs of the individual, rather than on a fixed age.

4.6 Self help groups should provide support services for the individuals and also for their families. This may be done, through either integrated or separate groups, for individuals and their families.

4.7 Individuals with eating disorders, along with their families, should be encouraged by treatment professionals to join their local self-help group.

4.8 Treatment facilities should facilitate self-help groups by providing space and encouraging treatment professionals to become involved.

4.8.1 Although self-help groups should remain independent of the administrative and program structure of the treatment facility, there should be a close link between treatment resources and self-help groups.

4.8.2 Facilitators, educators, and speakers should be provided for the self-help groups by the treatment facilities.

Epidemiology

5.1 Each provincial centre should be provided with sufficient financial support to provide for the establishment of a core research program in the eating disorder field.

5.2 A clinical epidemiology unit for the study of eating disorders in B.C. should be established in conjunction with the provincial coordinating body. The unit should undertake ongoing studies of incidence and prevalence of each type of eating disorder, monitor trends and develop early warning indices, provide a consultative service to regional or provincial centres, provide a consultative service to the proposed central registry, and assist any bona fide investigator with the design or analysis of studies based on eating disorders in B.C.

5.3 Two clinical nutrition-metabolic research units should be established, one at the adult-oriented provincial treatment centre and the other at the child/adolescent-oriented provincial treatment centre.

5.4 A longitudinal study of the "natural history" of each type of eating disorder be undertaken. Such a study would require a sustained commitment over a number of years and should be a collaborative project under the auspices of the proposed clinical epidemiology unit

Administration

6.1 A provincial coordinating body for eating disorders should be established within the Ministry of Health and be mandated to work collaboratively with the principal professional and lay constituencies in order to implement the recommendations of the EDTF.

6.1.1. An advisory committee of knowledgeable health professionals and representatives of ANAD should be struck to advise the Ministry of Health on the specifics of resource allocation.

6.1.2. An education and manpower committee of Deans and Heads of Departments from each of the relevant disciplines within the health sciences should be struck to advise the Ministry of Health on the specifics of resource development.

6.2 The British Columbia Medical Association should be asked to examine the adequacy of current reimbursement for physicians providing services to patients with eating disorders.

6.3 Within the Ministry of Health; Hospital Programs, Child/Youth Mental Health Services, Public Health Nursing and Community Supports, and Nutrition should develop administration and budgetary channels that will enable integrated regional eating disorder programs to be developed.

6.3.1 Each regional centre should be able to receive funds from more than one government ministry, private agency, or fee source, and staff should be able to be recruited and assigned on a cross-agency basis.

6.4 An interagency committee should be established in each region and be charged with the responsibility of establishing priorities and allocating resources.

6.5 Local groups interested in the problem of eating disorders should be encouraged to become a chapter within ANAD and, where appropriate establish a non-profit society.

6.5.1 The proposed society (or societies) should serve a self-help function.

6.5.2 The proposed society (or societies) should contract to provide support groups, community education and prevention programs, residential care, or even active treatment.

6.6 The Health Sciences faculties at universities in B.C. should commit themselves to the establishment of an academic thrust in the area of eating disorders.

6.6.1. Tenure and non-tenure appointments in the area of eating disorders should be developed by the Faculty of Medicine and where appropriate, by the other health science faculties.

6.6.2 The curricula in psychiatry, internal medicine, nursing, paediatrics, general practice, dietetics, and other health professions should offer adequate training in the prevention, early detection, and treatment of eating disorders.

6.6.3 Support for a geographic full-time academic position in the area of eating disorders should be provided to the Faculty of Medicine at UBC.

Strategies for Implementation

The EDTF believes that eating disorders constitute a significant group of health problems that warrant development of improved services.

The standard of care provided by the existing eating disorder treatment programs in B.C. is of an extremely high calibre. However, there is a clear public and professional consensus that the resources for the treatment of eating disorders in B.C. are stretched beyond their capacity to cope with the existing caseload. The EDTF is concerned that there is a risk that these hard to replace professionals will withdraw from the field rather than continue to bear such an unremitting and heavy treatment burden. There is an acute need to respond to and alleviate the stress being experienced by the existing treatment teams. Prompt implementation of Stage 1 proposals would help to avert the collapse of these specialized treatment teams.

The present system for the care of eating-disorder patients is almost entirely based in tertiary care institutions. There is an acute need for training of primary care health professionals in the early recognition of eating disorder problems. Some primary care workers (e.g. family physicians, nurse clinicians) have expressed an interest in becoming involved in the treatment of eating disorders. These health professionals need to be encouraged through the opportunity to enroll in continuing education programs designed to increase their knowledge and skill in the primary care management of eating disorders.

Mild Eating Disorder. Bulimia Nervosa - Recommended Treatment

Mary is a 19-year-old clerical worker in Victoria. She maintains her weight but has become bulimic. She has been receiving counselling from her family physician and has sought treatment through a private counsellor, but her symptoms have recently become more severe. She is binging and purging daily, abusing laxatives, and over exercising. She is referred by her family doctor to the regional centre in Victoria, where a more in-depth assessment is performed. Recommendations are made to her family physician and counsellor for specific approaches to treatment, with good result.

Priority should be placed upon strengthening each community's capacity to respond to the needs of the eating disorder patients in its own area. Funding support that would encourage the development of continuing education programs on eating disorders (e.g., the St. Paul's Hospital conferences or the McCreary Centre seminar series) should be available as part of each regional centre's budget. This may be provided by means of grants for guest speakers, travel support for outreach programs, registration fee and expense allowances, etc. In addition, each provincial centre should have an educational budget to cover the costs of producing educational materials, coordinating education programs, and offering back-up support to each region (traineeships, teleconferences, hot-line consultation services, etc.).

Redeployment of existing health personnel and/or budget will not suffice to meet the needs of the present caseload. The needed changes cannot be effected without new capital and operating funds. The EDTF suggests the following stages for implementing the general principles and recommendations outlined in this report.

STAGE 1 (1989 - 1991)

1. Create an adult oriented provincial treatment centre at either St. Paul's Hospital or University Hospital UBC site. [cf rec 1.7.2]

2. Designate either Sunny Hill Hospital or B.C. Children's Hospital as the child-adolescent oriented provincial treatment centre and establish a formal, integrated Sunny Hill - B.C. Children's Hospital program at that site. [cf rec 1.7.1]

3. Recognize Kelowna General Hospital as the regional treatment centre for the Okanagan-Kootenay region. [cf rec 1.5]

4. Establish a regional treatment centre for the Capital region. [cf rec 1.5]

5. Contract with ANAD to establish self-help and support groups and recruit a facilitator. [cf rec 4.3]

6. Develop a travelling team program to service the Northern region. [cf rec 1.6.5]

7. Provide an evening hospital program for adults in Metropolitan Vancouver. [cf rec 1.3.3]

8. Set up 4 to 6 bed adult-oriented regional residential facilities in Vancouver and in the Okanagan-Kootenay region. [cf rec 1.9, Appendix D]

9. Establish a satellite treatment centre for eating-disordered adults (affiliated with the adult-oriented provincial treatment centre) in Surrey to serve the Fraser Valley-Lower Mainland region. [cf rec 1.5.2]

10. Develop a public awareness and health promotion program along guidelines similar to the federal initiative "Promoting Healthy Weights". [cf rec 3.1]

Moderate Eating Disorder Anorexia Nervosa - Recommended Treatment

Jane is a 15-year-old high school student in Summerland. She has developed serious symptoms of anorexia nervosa with marked weight loss, medical complications, and behavioral changes (obsessive compulsive symptoms, phobias, and distorted body image). After initial assessment and treatment by her family physician, she is referred to the regional centre in Kelowna for in-depth assessment. She is assessed to require brief inpatient treatment for medical stabilization and treatment in Kelowna. After stabilization and treatment she engages in follow-up treatment which involves nutritional treatment, family counselling, and individual support. She and her family also receive support from the local self-help organization. Her family physician continues to monitor her improvement and maintains contact with the regional centre in Kelowna.

11. **Contract with the McCreary Centre Society to continue the development of Camp Elsewhere as a resource for adolescents with eating disorders. [cf rec 1.8.2]**

12. **Establish a provincial coordinating body to supervise implementation of the EDTF recommendations and develop appropriate cost estimates and budgetary proposals. [cf rec 6.1]**

13. **Provide financial support to the Faculty of Medicine at UBC in order to provide a geographic full-time academic position in the field of eating disorders and to augment its resources so that the teaching hospitals may more properly meet their existing mandate as treatment centres. [cf rec 1.5,1.6,1.7]**

STAGE 2 (1991 - 1992)

1. Establish a regional treatment centre in Prince George to serve the Northern region. [cf rec 1.5]

2. Develop satellite treatment centres in Nanaimo (to serve Upper Vancouver Island) and in Cranbrook (to serve the Kootenays) and have these centres affiliate with the regional treatment centres in Victoria and Kelowna. [cf rec 1.5.2]

3. Expand the travelling team program to cover all regions not served by a regional treatment centre or its satellite. [cf rec 1.6.5]

4. Expand the regional residential facilities program to include a 4 to 6 bed facility in Victoria, provision for children and adolescents, and to cover the needs in each region of the province served by a regional treatment team or centre. [cf rec 1.9.2]

5. Create university affiliated eating-disorder research units at each provincial treatment centre. [cf rec 5.1]

6. Create an eating disorder information network in support of healthy eating and eating disorder prevention programs in each region. [cf rec 2.1.3,2.2]

Severe Eating Disorder. Anorexia Nervosa complicated by Diabetes Mellitus and Borderline Personality Disorder - Recommended Treatment

Anne is a 40-year-old unemployed woman in Surrey. She has had longstanding psychiatric problems, which have included recurrent suicidal behaviour and paranoid ideation. She has previously been treated in various psychiatric facilities and medical units due to serious co-morbidities. She is referred by her family physician to the Provincial centre (in Vancouver) due to medical crisis caused by the combination of severe anorexia nervosa and diabetes mellitus. She was using large doses of insulin in an attempt to lose weight and had developed severe renal, retinal and peripheral nerve changes. Due to concurrent psychiatric problems, management is particularly difficult. After treatment in the Provincial centre her condition is stabilized and improved. She is referred to the residential treatment facility in the Lower Mainland, area and she is returned for follow-up care to her family physician.

7. Develop funding mechanisms that will encourage local and regional response to provincial prevention and treatment initiatives. [cf rec 6.3.1, 6.5.2]

9. Appoint an interministerial committee to review eating and weight-related program content within government agencies. [cf rec 3.2]

10. Develop a healthy eating and eating-disorder curriculum and offer continuing education programs for health professionals and students in the health professions. [cf rec 2.1.4, 6.6.2]

STAGE 3 (1993 - 1994)

1. Establish a regional treatment centre in Surrey to serve the Lower Mainland region. [cf rec 1.5]

2. Continue to develop the satellite programs affiliated with established centres and, where indicated, reduce or redirect travelling team programs. [cf rec 1.5.2]

3. Develop a provincial network of support groups and self-help groups. [cf rec 4.1]

4. Construct a facility to house the provincial treatment team for children and adolescents. [cf rec 1.7.1, 1.8.1]

5. Expand, where indicated, the residential facilities program. [cf rec 1.9]

Severe Eating Disorder. Morbid Obesity - Recommended Treatment

George is a 13-year-old boy from Dawson Creek. He has severe morbid obesity associated with medical complications and also school failure. He lives in a single parent, welfare-supported family, and there is minimal control of his eating behaviour. His mother has undiagnosed psychopathology and he is frequently depressed and occasionally suicidal. He is referred by the family physician to a camp for adolescents with eating disorders. Although George did well at the camp he must return home to Dawson Creek and to an unsupportive family situation. The regional centre in Prince George makes arrangements for George to move into a therapeutic group home, and the community mental health team initiates an assessment of his mother.

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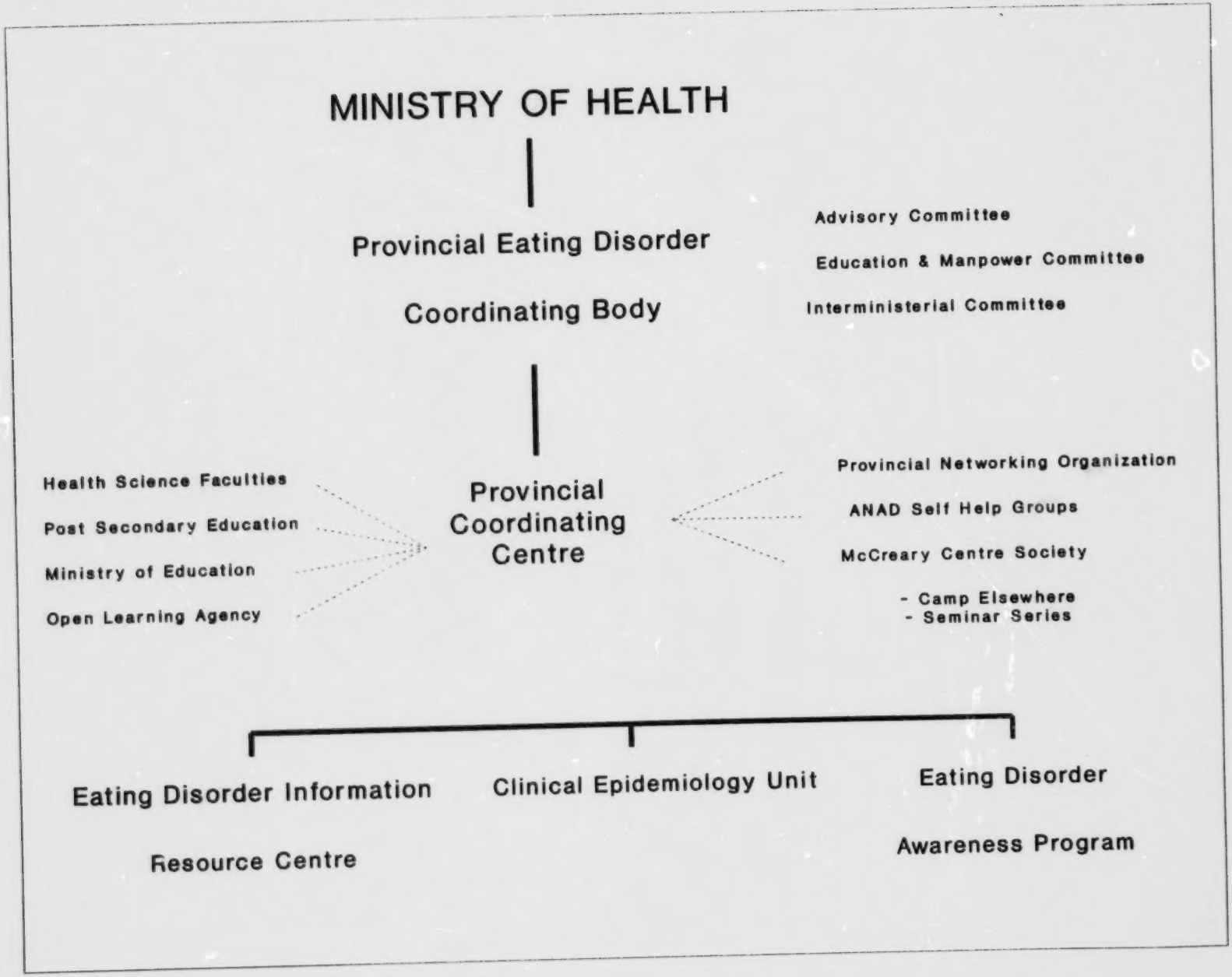
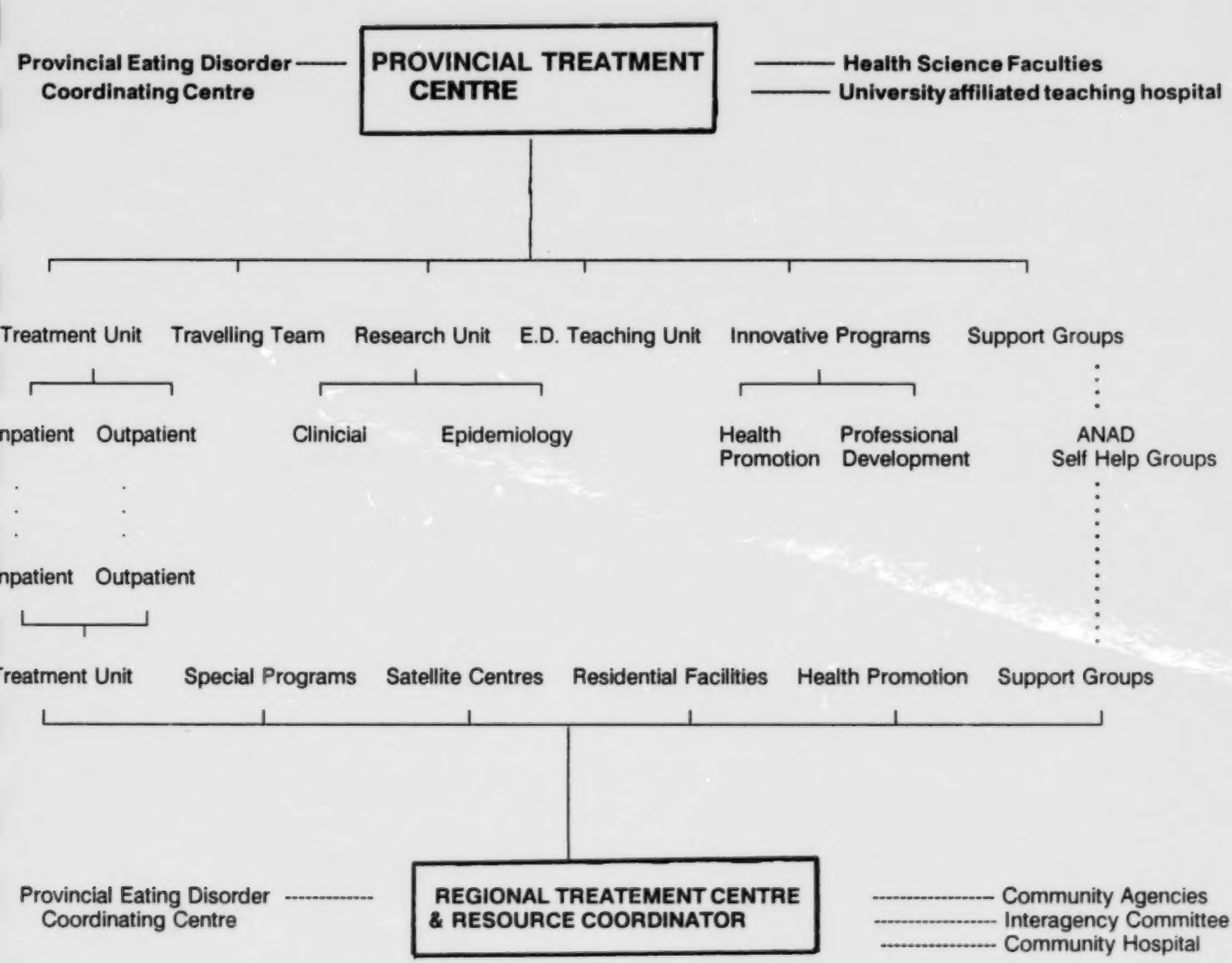
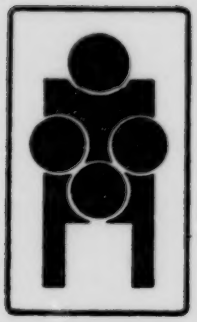

MINISTRY OF HEALTH
Provincial Eating Disorder
Coordinating Body
Advisory Committee
Education & Manpower Committee
Interministerial Committee
Health Science Faculties
Post Secondary Education
Ministry of Education
Open Learning Agency
Provincial
Coordinating
Centre
Provincial Networking Organization
ANAD Self Help Groups
McCreary Centre Society
- Camp Elsewhere
- Seminar Series
Eating Disorder Information
Resource Centre
Clinical Epidemiology Unit
Eating Disorder
Awareness Program


Provincial Eating Disorder Coordinating Centre
PROVINCIAL TREATMENT CENTRE
Health Science Faculties
University affiliated teaching hospital
Treatment Unit
Travelling Team
Research Unit
E.D. Teaching Unit
Innovative Programs
Support Groups
npatient
Outpatient
Clinicial
Epidemiology
Health Promotion
Professional Development
ANAD Self Help Groups
npatient
Outpatient
reatment Unit
Special Programs
Satellite Centres
Residential Facilities
Health Promotion
Support Groups
Provincial Eating Disorder Coordinating Centre
REGIONAL TREATEMENT CENTRE & RESOURCE COORDINATOR
Community Agencies
Interagency Committee
Community Hospital



The McCreary Centre Society is a registered non-profit society with tax exempt status. It was incorporated in 1977 and has a ten member Board of Directors. The aim of the Society is to encourage and support the study of adolescence through the application of behavioural sciences. The Society has also actively supported a number of seminars and conferences on child health, early adolescence, and adolescent risk-taking behaviour. The Society supports interuniversity-interdisciplinary research, and promotes the dissemination of research-based, locally relevant behavioural and/or child development oriented information.

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Volume

2

THE McCREARY CENTRE SOCIETY

C/O SUNNY HILL HOSPITAL FOR CHILDREN • (604) 433-3491
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THE PROVINCIAL TASK FORCE

EATING DISORDER REPORT

VOLUME II - RESEARCH COORDINATOR'S REPORT

Prepared for the Ministry of Health

By

Dan LeGoff
McCreary Centre Society
3644 Slocan Street
Vancouver, BC V5M 3E8

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Introduction

The following report presents the results of a number of studies which were undertaken by the Provincial Eating Disorders Task Force in order to: a) assess the extent to which eating disorders are a problem within the population of the province of British Columbia; b) determine the current level of utilization of hospital facilities by eating disordered patients; and c) provide information about the adequacy of health care resource levels for current treatment requirements by eating disordered patients.

In order to address these goals, the task force undertook the following research projects:

Extent of the problem:

i. Surveys of general population eating patterns through distribution of an eating disorders questionnaire to pedestrian traffic in shopping malls throughout the province.

ii. Survey of populations of individuals thought to be at higher risk for the development of an eating disorder by distributing eating disorders questionnaire.

- Utilization of hospital facilities:

i. Statistics from Ministry of Health - Hospital programs on utilization of beds, and number of hospital separations by region.

ii. Statistics from Ministry of Health - Hospital Programs on utilization of beds, and number of hospital separations for hospital with formal eating disorders programs.

- Adequacy of provision of health care:

i. Family physicians were surveyed by distribution of a questionnaire which asked for information about the number of patients assessed, treated, and/or referred for treatment of eating disorders, and the length of wait that patients had in order to receive treatment.

ii. Dietitians and nutritionists were surveyed by distribution of a questionnaire about treatment of eating disordered patients.

iii. Individuals responding to the Mall Survey who had had an eating disorder were asked about the availability and utility of treatment.

The data provided by this report is far from complete, or methodologically flawless. The general shortcoming of the data as a whole include: quasi- or non-random selection of samples; small sample sizes; and non-naive subjects, both lay and professional. Consequently, the results should be interpreted cautiously.

Extent of the Problem

I. Mall Surveys

Introduction

The method used to collect prevalence data has shortcomings in terms of random selection of subjects both with regard to socioeconomic status (SES) bias -- the selection was necessarily limited to traffic at the malls surveyed, which may or may not represent a fair sampling of the entire range of SES -- and a bias introduced by subject self-selection -- only those shoppers interested enough to approach the mall display were included in the sample.

A reasonably broad range of social and cultural groups may be represented by a mall sample due at least in part to the wide range of goods and services available at a large shopping centre (Pope, Hudson, and Yurgelun-Todd, 1984). Certainly, the mall may provide a more diverse, representative sample than that provided by studies involving exclusively school and university students, or hospital and clinic patients -- populations often used in studies of eating disorder prevalence (eg. Cooper, Waterman & Fairburn, 1984; Greenfield, Quinlan, Harding, Glass & Bliss, 1987; Johnson-Sabine, Wood, Patton, Mann & Wakeling, 1988; Bailey & Goldberg, 1989).

The impact of the self-selection bias was mitigated somewhat by the fact that the questionnaire was completed anonymously, and that it was scored for the individual completing the questionnaire only; that is, no second-hand reports of eating disorders were accepted. The results likely reflect a conservative bias of prevalence due to the hesitance of eating disordered individuals to report their eating behaviors.

The EDTF chose the mall survey method because: a) the method has been used by other researchers (Pope et al, 1984); and b) it is economical. The

survey needed to be economical of time, money, and manpower. The mall method met these constraints.

Method

Subjects

There were 1,041 respondents to the 14 mall surveys. The age, height, weight and body mass index (BMI) for these subjects are presented in Table 1. The ranges of both age and body size for the total sample are quite broad (73 years, and 124.7 kg, respectively), and the means for these variables is consistent with statistics reported for general population samples (Metropolitan Life, 1984).

Characteristics of respondents from the five regions of the province represented by the mall surveys are presented in: Table 2 (Greater Vancouver), Table 3 (Victoria), Table 4 (North Vancouver Island), Table 5 (Okanagan-Kootenay), and Table 6 (North).

Procedure

Method of distribution. In each of the malls a display table was set up on which was: the questionnaire, a box for depositing completed questionnaires, a poster advertising the survey, sheets describing the symptoms of anorexia nervosa and bulimia nervosa, sheets providing information about available treatment resources, and a video screen on which was displayed a five-minute taped interview of Dr. Tonkin discussing eating disorders.

Volunteers who were parents of eating disordered patients, recovered adults patients, or health professionals involved in treating eating disorders manned the display tables. There were two volunteers at each display. The volunteers provided information to interested individuals, and encouraged those who visited the display to complete the questionnaire. The mall display was set up and the questionnaire was available during peak traffic hours (between 1100 and 1700 h) on weekends. The survey was conducted for two consecutive days at each mall on one weekend between June 10 and August 13, 1989.

Malls Surveyed. Malls used were selected on the basis of regional representation, and availability. The particular malls used to represent each of the five regions were as follows:

- Greater Vancouver: Seven-Oaks Mall in Abbotsford,
  Coquitlam Centre in Coquitlam,
  Park Royal Mall in North Vancouver,
  Surrey Centre in Surrey,
  Lougheed Mall in Burnaby,
  Lansdowne Centre in Richmond;
- Victoria: Tillicum Mall,
  Hillside Mall;
- North Van Island: Duncan Mall in Duncan,
  Woodgrove Centre in Nanaimo;
- Okanagan-Kootenay: Village-Green Mall in Vernon,
  Orchard Park Mall in Kelowna,
  Cranbrook Mall in Cranbrook;
- North: Pine Centre Mall in Prince George.

Instrument. The eating disorders questionnaire used in both the mall surveys and the high-risk populations survey was one legal-size page, double-sided, with a total of 28-items (see Appendix A). This questionnaire was developed for a previous mall study (Manley & Fox, unpublished manuscript), and is based on the DSM-III-R criteria for anorexia nervosa and bulimia nervosa.

As well as questions directly addressing behavioral criteria for an eating disorders diagnosis, questions about history of anorexia or bulimia (items 14 & 15), experience with treatment (items 16 - 18), and co-morbidity (item 20) were also included. Respondents were asked their age, weight, height and sex on the face side of the sheet. BMI values were calculated by converting reported height and weight values into meters and kilograms, respectively, then entered into the formula:

$$BMI = \text{Weight (kg)} / \text{Height}^2 (m^2)$$

Subject Classification. Respondents were classified into six mutually exclusive groups according to the following: 1) anorexia nervosa - met the complete criteria for this disorder, including weight loss, but did not also meet criteria for bulimia nervosa, and did not report a medical or psychiatric illness which might otherwise account for symptoms; 2) bulimia nervosa - met the criteria for this disorder, did not also meet criteria for anorexia nervosa, and did not report a body weight in the obese range; 3) anorexic-bulimic - met the complete diagnostic criteria for either anorexia nervosa or bulimia nervosa, and reported a positive history of the other, or simultaneously met criteria for both anorexia nervosa and bulimia; 4) obesity - reported a body weight in the obese range (BMI > 28); 5) obese-bulimic - met the diagnostic

criteria for bulimia nervosa, and reported a body weight in the obese range; 6) normal - did not meet the complete criteria for either anorexia nervosa or bulimia nervosa, and had a body weight below the obese range (BMI < 28).

Results

Overall

The total number of eating disorders reported, as well as the proportion of each type of eating disorder, is reported in Table 7, and Figure 1. The largest group was the obese, which was only slightly larger than the bulimic group. These were followed by the bulimic-anorexic, the anorexic, and finally, the obese-bulimic group. The age, height, weight, and BMI for each of these eating disordered groups, as well as for the normal group, are reported in Table 8.

The characteristics of each of the eating disordered groups, proportion of each sex, age at onset, duration of illness, and highest and lowest personal body weight (BMI), are reported in Table 9. The specific behaviors related to eating pathology within each of the six groups was tabulated. Frequencies of behaviors related to more or less normal but restrained eating patterns -- dieting and/or fasting, and vigorous exercise -- are reported for normal and eating disordered subjects in Table 10. Frequencies of more clearly problematic eating behaviors, ie. those included as symptoms in the diagnostic criteria for eating disorders, are presented for normal and eating disordered respondents in the following figures:

- binge-eating (Figure 2)
- vomiting (Figure 3)
- laxative use (Figure 4)
- diuretic use (Figure 5)
- "other" weight loss techniques (Figure 6)

Regional

The total number of eating disorders reported in each of the five survey regions, and the percentage of the total number of eating disorders represented by the regions is presented in Figure 7. As each region is represented by a different sample size which does not necessarily reflect the relative population sizes of the regions, the number of eating disorders reported in each region reflects the sample size for that region. Table 11 represents the percentage of the total number of eating disorders in each

region controlling for differences in sample sizes by using a common denominator of 100. Table 12 presents the percentage of the total number of eating disorders represented by each type of eating disorder within each region.

Discussion

The reported prevalences of anorexia nervosa (1.9%) and bulimia nervosa (5.2%) in our general sample are reasonably similar to those reported in similar studies. For example, Pope et al, who used the mall method, found a prevalence of anorexia nervosa slightly lower than ours (0.7%) and a prevalence of bulimia nervosa somewhat higher than ours (10.3%), however, they did not make the distinctions between bulimic-anorexic and restricting anorexic, and between obese-bulimic and normal weight bulimic that we did here. They also based their group classification on DSM-III, while we used DSM-III-R. According to Cooper, Charnock and Taylor, the prevalence of bulimia using DSM-III criteria is in the neighbourhood of 4.5%, which is very close to our own result. Our prevalence value for anorexia nervosa is somewhat higher than the 1% reported by Crisp, Palmer & Kalucy (1976); but slightly lower than that reported by Kurtzman, Yager, Lansverk, Wiesmeier and Bodurka (1989): 2.2%.

As would be predicted by literature on the relation between SES and eating disorders, the greatest relative proportion of eating disorders was found in Greater Vancouver. This higher prevalence of eating disorders, however, was not seen in the second largest urban region, Victoria (see Figure 7). In fact, on the whole, the prevalence of eating disorders could be said to be fairly evenly distributed throughout the province.

II. High-Risk Population Survey

Introduction

The results in this section of the report are about sub-sections of the population which have come to be associated with higher incidences of eating disorders. The pressures toward thinness identified by many writers as etiologically significant in the general population (eg. Bailey & Goldberg, 1989; Garner & Garfinkel, 1985; Bruch, 1973), are especially salient in these groups: ballet dancers, fashion models, member of fitness clubs, and individuals with diabetes mellitus. A focus on body weight, and/or strict control of food intake appears to represent a risk factor for the development of an eating disorder. Groups which have already identified themselves as

having concerns related to eating and body weight, such as weight loss clinics, and eating disorder self-help groups, are likely to reflect increased prevalences of eating disorders. Unfortunately, these data are quite limited for some of the groups and present an incomplete picture at best.

Method

Subjects

Overall, there were 67 respondents to this survey. The age, height, weight, BMI, and sample sizes for each of the high-risk groups are presented in the following tables: Table 13 (ballet school), Table 14 (modelling agency), Table 15 (diabetes clinic), and Table 16 (eating disorders support group).

Procedure

Distribution of questionnaires. The questionnaires were distributed to these samples in a manner quite similar to that used for the Mall Survey, although over a longer period of time. A display was set up within each of the respective institutions which included questionnaires, a box for completed questionnaires, an eating disorders poster, descriptions of eating disorders, and lists of resources. These displays did not include the video-taped interview, and there were no volunteers present. The displays were left in an accessible area for up to two weeks before being collected.

Instrument. The eating disorders questionnaire used to sample the high-risk populations was identical to that used in the Mall Survey (see Appendix A).

Subject Classification. Subjects were categorized into groups according to the same criteria used in the Mall Survey.

Results

In total, there were 13 eating disordered respondents in the high-risk sample. This represents 19.4% of the total high-risk sample (N = 67) which is notably higher than the 15.8% eating disorders found in the Mall Survey sample. The age, height, weight, and BMI for normal and eating disordered respondents in the high-risk sample are reported in Table 18.

Characteristics of the eating disordered respondents -- age of onset, duration, highest and lowest personal BMI -- are presented in Table 19. Within this sample of individuals for whom weight and/or diet are central daily concerns, there were no obese or obese-bulimic respondents. The mean age for this

sample overall was 24.3 years which is lower than the overall mean age for the Mall Survey sample, 30.8 years. This lower average, and more restricted range, may have been partly responsible for the lower prevalence of obesity.

The prevalence of anorexia nervosa was 4.4% and for bulimia nervosa was 7.5%. The prevalence of anorexia was then considerably higher than that reported in the literature, and twice that found in the Mall Survey sample. The incidence of bulimia nervosa was somewhat higher than that found in the Mall study but quite similar to that reported in other studies of high-risk groups (eg. Borgen & Corbin, 1987; Garner, Garfinkel, Rockert & Olmsted, 1987). A comparison between clinical characteristics of the eating disordered respondents from the two samples (age of onset, duration, highest and lowest weights) yields striking similarities (Tables 9 & 19). This correspondence between the two samples suggests a certain consistency in these features for eating disordered patients, and enhances our confidence in the reliability of these results.

The percentages of normal and eating disordered respondents reporting dieting and/or fasting, and exercise for weight loss are presented in Table 20. The frequencies of pathological eating patterns for this sample are presented in Table 21. Once again, the consistency between the eating patterns of the two samples is notable: compare Table 21 to Figures 2 - 6. The correspondence between the frequencies of eating disordered behavior for these two samples suggests that eating disorders in the high-risk sample may be more prevalent, but otherwise are not distinct from those found in the general population.

Utilization of Hospital Facilities

Introduction

The data presented in this section represent a summarization and reorganization of data provided to the task force by the Ministry of Health - Hospital Programs Department. The summary data on the utilization of hospital beds and the number of separations (hospital discharges) for each of five macroeconomic regions, Greater Vancouver, Vancouver Island, Kootenay, Okanagan, and North, are presented in the tables and figures are based on statistics for the period April 1, 1983 to March 31, 1988.

Summary of Hospital Programs Statistics

Overall

The total number of hospital bed days and the number of separations for each year from 1983-84 to 1987-88 for the province are presented in Figure 8. There has been an increase from under 12,000 bed days, and approximately 800 cases per year, to between 14,000 and 15,000 bed days, and over 1,000 cases per year.

Figure 9 shows that the greatest percentage of bed days has been utilized by obese patients, followed by patients suffering from anorexia nervosa. The number of separations for the obese group is more than three times that for anorexia nervosa and bulimia nervosa combined (Figure 10).

Regional

Figure 11 reveals that Greater Vancouver has the lion's share of the regional distribution of bed days utilized. Half of all bed days utilized by eating disordered patients for 1983-88 were at Greater Vancouver hospitals. Almost half of all separations for eating disordered patients were reported for Greater Vancouver hospitals (Figure 12).

It should be noted that our Mall Survey results indicated that Greater Vancouver represented only about 26.9% of all eating disorders in the province (Figure 7). A comparison of Figures 7 and 12 suggests that many eating disordered individuals receive treatment in a region different from that in which they reside. About 20.7% of all cases of eating disorders are treated in Greater Vancouver hospitals, but come from some other region. Other regions have a smaller percentage of cases treated than cases reported. The largest difference exists in the Vancouver Island region where the percentage of the total number of eating disordered respondents in the Mall Survey was 29.6%, and the percentage of total number of cases treated was 17.2%.

The hospital bed days utilized and number of separations for each type of eating disorder within each region for 1983-88 are presented in Table 22. The relative distributions of cases and days for each eating disorder is fairly consistent across regions, with obese patients being the largest hospital care consumers, followed by anorexic patients, and finally bulimics. In regions where there is specialized treatment available for eating disorders, Okanagan, Vancouver, and Victoria, the utilization of hospital bed days by

anorexics is much closer to that used by the obese, than in regions where there is no formal hospital-based program: Kootenay and North.

Age Groups

Figure 13 represents the percentage of bed days used by eating disordered patients within the age groups: 19 and under, 20 to 49, and 50 and over. The 20 to 49 year old group, used almost two-thirds of the total number of eating disorders hospital bed days between 1983 and 1989. They represent an even greater percentage of the total number of hospital separations (based on principal diagnoses only).

Table 23, shows a consistent trend across all types of eating disorders, with the 20-49 group using most beds and representing most cases. The distribution of eating disorder type within age groups changes across age groups. For instance, in the under 19 group, the largest number of bed days and cases by far is accounted for by anorexic patients. In the 20-49 age category, the largest number of cases and bed days belongs to the obese, although anorexia nervosa is still quite prominent. In the over 50 group, obesity is more clearly dominant, and the number of cases and bed days utilized by anorexics is greatly reduced.

Table 24 presents the average number of bed days per case for each type of eating disorder. The number of hospital bed days reported of morbid obesity is much lower than that for either bulimia or anorexia under the age of 49. In the 50 and over group, obesity requires slightly more hospital days. The disorder requiring the largest average number of bed days/case is anorexia nervosa with 32.8. This average is even higher for the two groups under 48 years: 34.8 days/case.

Yearly

The number of bed days and separations reported for each year from 1983/84 to 1987/88 for each of the eating disorders is reported in figures: Figure 15 (Anorexia nervosa), Figure 16 (Bulimia nervosa), Figure 17 (Morbid obesity).

Figure 15 reveals a fairly steady increase in the number of bed days utilized and the number of separations reported for anorexic patients. Figure 17 shows a less consistent picture of the utilization of hospital facilities by the morbidly obese but still represents a net increase in utilization. The data for bulimia nervosa also suggests a steady increase in number of cases and utilization of beds, however, there is a dramatic drop in both cases and beds

in the final year. This finding is paradoxical considering that much recent research literature suggests that bulimia is increasing in prevalence (eg. Dupont, 1984; Cooper, Charnock & Taylor, 1987). It is therefore unlikely that this dip represents a decrease in the health care demand per se of this patient group but rather reflects development of outpatient treatment alternatives.

Hospital Specific Data

Utilization data for eating disordered patients specific in each of five hospitals which provide specialized treatment programs for eating disorders for the years 1983 to 1988 is described in this section.

The total number of bed days and separations for all types of eating disorders for each year from 1983/84 to 1987/88 is represented in: Figure 18 (University Hospital - UBC Site), Figure 19 (University Hospital - Shaughness Site), Figure 20 (St. Paul's Hospital), Figure 21 (Kelowna General Hospital), and Figure 22 (B.C. Children's Hospital). The regional data represented a relatively uniform increase across years, whereas the hospital specific data shows much more variability in utilization. It is likely that this variability reflects shifts and alterations in the level of resources provided for the treatment of eating disorders at each of these setting while the regional data suggests that the overall demand has increased consistently.

The total number of bed days and cases diagnosed of each eating disorder for the years 1983-88 for each hospital is represented in Table 25. Notably, with the exception of St. Paul's Hospital, by far the largest consumers of hospital facilities are the anorexic patients. These patients clearly consume an extensive number of bed days especially in comparison to the morbidly obese. The degree of variability across hospitals in distribution of cases and days per eating disorder suggests that although each of these hospitals offered specialized eating disorders treatment, their relative foci in this regard were quite different. It is unlikely, especially given the Mall Survey regional data (Table 12), that the differences in hospital utilization represent regional population differences but rather reflect differences in tertiary care role.

Adequacy of Provision of Health Care

I. Physicians' Referral Questionnaire

Introduction

This section reports the results of a questionnaire survey of family physicians which asked about the numbers of eating disordered patients they came into contact with in their practices, and how often and to whom they referred these patients.

Method

The questionnaire was circulated to various groups of general practitioners either through the mail, or directly to them through the hospitals in which they were working, in the form of a letter (see Appendix B). Responses were either collected locally or were mailed back to the task force individually.

The distribution of the questionnaire included physicians from three regions: Greater Vancouver, Vancouver Island, and Okanagan.

Results

Overall

The total number of respondents to the questionnaire was 83. The total number of reported cases, average number of cases per physician, age of patients, and number of patients referred for assessment and treatment are presented in Table 26. This data suggests that most physicians are seeing at least some cases of eating disorders. The largest group of eating disordered patients seen by GPs is the morbidly obese, but a significant number of bulimic and anorexic patients are also seen. These patients vary widely in age. Physicians refer, on average, 43.5% of eating disordered patients for assessment and 40.0% of eating disordered patients for treatment. In every 12 months, then, the average GP refers 1.4 patients for assessment and 1.3 patients for treatment of some kind of eating disorder.

Table 27 presents the percentage of eating disorder cases seen by GPs which they refer to various specialties, and the average length of wait which their patients experience in order to receive referral care.

The highest percentage of cases of eating disorders are referred by GPs to dietitians (45.6%) followed closely by psychiatrists (42.3%). Note that these are not mutually exclusive categories.

The least likely referral by GPs is to an inpatient unit (0.8%). Inpatient units were also rated as having the longest wait for treatment (12 weeks). No doubt these two figures are related. The overall average waiting period reported by physicians in order for their patients to receive eating disorders treatment was 7.5 weeks.

Regional

The total number of reported cases, average number of cases per physician, average patient age, percent of patients referred for treatment and assessment, percentage of cases referred to each specialty, and wait associated with each specialty are presented for each of the regions in the following tables: Table 28 (Greater Vancouver), Table 29 (Okanagan), Table 30 (Vancouver Island).

The average number of cases of the eating disorders anorexia nervosa and bulimia nervosa seen by GPs in the Vancouver Island region is much higher than that reported for either Greater Vancouver or Okanagan. This higher level of demand may reflect the fact that the other two regions currently have specialized eating disorders treatment programs while the Vancouver Island region does not. The Vancouver Island physicians also report seeing more bulimic patients than either obese or anorexic, while for the other two regions, the most commonly seen eating disordered patients are the morbidly obese.

Although the level of treatment resources for eating disorders is greatest in the Vancouver region, physicians in this region report the longest wait for treatment for their eating disordered patients; twice as long, on average, as the other two regions.

II. Dietitians' Survey

Introduction

The data reported here are based on a questionnaire which was developed and distributed by task force member Sue Ross. The questionnaire was distributed to registered dietitians and requested them to provide information about the number and type of eating disorders which they were

being referred for counselling in the past 12 months, the length of their waiting list for new referrals.

Results

The total number of respondents to the dietitians' survey was 25. The number of cases treated, number of dietitians who treat any eating disorders, average number of eating disorders per dietitian, dietitians' average wait period, and self-ratings of adequacy of training, are reported in Table 31.

The great majority of respondents had treated at least one of each of the eating disorders in the past twelve months. The average number of eating disordered patients seen by respondents in a twelve month period was 6.2. Some dietitians had seen a great number of eating disordered patients (up to 28 anorexics) which corresponds with the data provided by the physicians' questionnaire which revealed that dietitians were the most commonly referred-to specialty. The average waiting list reported by dietitians was slightly longer than that noted by physicians (4 weeks as opposed to 3.4 weeks).

III. Eating Disordered Mall Survey Respondents

Introduction

This section presents the results of the final three items on the Mall Survey eating disorders questionnaire. This data provides a measure of adequacy of health care provision for eating disordered respondents. It asks directly whether they were able to get treatment, and if they were able to get it, whether they felt it was helpful.

Method

The questions asked regarding treatment for eating disorders were included at the bottom of the eating disorders questionnaire (see Appendix A, page 2).

Results

The results for the total Mall Survey sample are presented in Table 32 for each type of eating disorder. Only 20% of bulimic patients sought treatment, and only 14% of this patient group found treatment available, yet 71.4% of those who found treatment reported that it was helpful.

Overall, about 50% of eating disordered patients find treatment available, and of those, 60% report that treatment has been helpful. However, only 50% of all eating disordered patients reported seeking treatment at all.

IV. Mortality Statistics

The data reported in Table 33 represent the total number of reported cases in which an eating disorder was cited as the primary cause of death. Data on the number of cases in which an eating disorder as listed as contributing to the cause of death were not available for this report. The data in Table 33 was provided by the Department of Vital Statistics for the Province of British Columbia for the year 1987-88.

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Table 1

Mall Survey

Age, height, weight and body mass index (BMI) for overall sample, males and females.

	Overall	Male	Female
N =	1041	212[a]	827[a]
Age (years)			
$\bar{X}$ =	30.8	32.5	30.4
SD =	13.7	13.3	13.8
Range =	73.0	61.0	73.0
Height (m)			
$\bar{X}$ =	1.67	1.78	1.64
SD =	.10	.08	.08
Range =	1.04	.56	.84
Weight (kg)			
$\bar{X}$ =	63.9	76.8	60.5
SD =	13.6	12.0	11.9
Range =	124.7	79.3	124.7
BMI[b]			
$\bar{X}$ =	22.9	24.2	22.5
SD =	4.9	3.8	4.4
Range =	24.5	11.5	24.5

[a] Missing gender data on two subjects.

[b] BMI = Weight (kg) / Height^2 (m^2)

Table 2

Mall Survey

Age, height, weight and body mass index (BMI) for Greater Vancouver region.

	Overall	Male	Female
N =	89	21	68
	$\bar{X}$	SD	Range
Age (years)	33.6	12.3	64.0
Height (m)	1.67	.10	.48
Weight (kg)	66.2	14.9	67.1
BMI[a]	23.7	5.3	15.9

Table 3

Mall Survey

Age, height, weight and body mass index (BMI) for Victoria region.

	Overall	Male	Female
N =	537	120	417
	$\bar{X}$	SD	Range
Age (years)	29.2	13.3	73.0
Height (m)	1.67	.10	1.12
Weight (kg)	62.5	13.3	124.7
BMI[a]	22.4	4.8	25.6

[a] BMI = Weight (kg) / Height^2 (m^2)

Table 4

Mall Survey

Age, height, weight and body mass index (BMI) for North Vancouver Island region.

	Overall	Male	Female
N =	73	15	58
	$\bar{X}$	SD	Range
Age (years)	28.7	13.5	57.0
Height (m)	1.69	.10	.61
Weight (kg)	67.5	15.9	86.2
BMI[a]	23.6	5.5	20.4

Table 5

Mall Survey

Age, height, weight and body mass index (BMI) for Okanagan-Kootenay region.

	Overall	Male	Female
N =	238	37	201
	$\bar{X}$	SD	Range
Age (years)	30.7	15.4	70.0
Height (m)	1.67	.09	.61
Weight (kg)	63.7	12.3	80.7
BMI[a]	22.8	4.4	19.1

[a] BMI = Weight (kg) / Height^2 (m^2)

Table 6

Mall Survey

Age, height, weight and body mass index (BMI) for North region.

	Overall	Male	Female
N =	104	18	86
	$\bar{X}$	SD	Range
Age (years)	38.8	9.6	42.0
Height (m)	1.67	.08	.41
Weight (kg)	66.8	14.0	80.3
BMI[a]	24.0	5.0	19.0

[a] BMI = Weight (kg) / Height^2 (m^2)

Table 7

Mall Survey

Number and type of eating disorders reported in Mall Survey for total sample.

Total number of eating disorders reported = 164

Eating Disorder Type	Number	Percentage of Total
Anorexia Nervosa	20	12.2%
Bulimia Nervosa	52	31.7%
Obesity	59	36.0%
Obese-Bulimia	10	6.1%
Bulimic-Anorexic	23	14.0%

Table 8

Mall Survey

Age, height, weight and body mass index (BMI) for normal, anorexic, bulimic, obese, obese-bulimic and bulimic-anorexic respondents, total sample.

	Normal	Anorexic	Bulimic	Obese	Obese Bulimic	Bulimic Anorexic
N =	877	20	54	57	10	23
Age (years)						
$\bar{X}$ =	30.8	23.7	27.5	38.5	30.2	27.3
SD =	14.1	8.2	9.7	13.6	4.7	6.7
Range =	73.0	28.0	40.0	53.0	16.0	25.0
Height (m)						
$\bar{X}$ =	1.67	1.62	1.65	1.64	1.66	1.67
SD =	.10	.07	.07	.09	.07	.08
Range =	1.04	.28	.38	.45	.20	.28
Weight (kg)						
$\bar{X}$ =	62.6	55.0	60.6	86.4	85.1	61.1
SD =	12.3	8.1	9.1	14.8	11.7	11.8
Range =	97.5	25.9	42.2	83.5	38.6	45.4
BMI[a]						
$\bar{X}$ =	22.4	20.9	22.3	32.1	30.9	21.9
SD =	4.4	3.1	3.4	5.5	4.3	4.2
Range =	23.2	6.8	11.1	14.3	11.5	10.8

[a] BMI = Weight (kg) / Height^2 (m^2)

Table 9

Mall Survey

Age of onset, duration, sex, highest and lowest individual body mass index (BMI) for eating disordered respondents, total sample.

		Anorexic	Bulimic	Obese	Obese Bulimic	Bulimic Anorexic
Sex	M =	0	3	10	0	0
	F =	20	49	49	10	23
Age of onset (years)						
	$\bar{X}$ =	16.4	22.8	35.4	26.6	21.1
	SD =	2.0	8.4	12.4	3.4	5.3
Duration (years)						
	$\bar{X}$ =	1.4	3.7	10.9	9.7	9.0
	SD =	.2	1.4	6.2	5.5	5.2
High BMI[a]						
	$\bar{X}$ =	23.4	25.4	34.9	35.8	26.1
	SD =	3.5	3.9	4.9	6.8	3.6
Low BMI[a]						
	$\bar{X}$ =	17.8	19.5	22.9	22.2	16.2
	SD =	2.7	3.0	3.2	4.2	2.2

[a] BMI = Weight (kg) / Height^2 (m^2)

Table 10

Mall Survey

Percentage of normal and eating disordered respondents reporting diet and/or fasting, and vigorous exercise for weight control.

Group		Dieting/fasting	Exercise
Normal	%	30.8	28.4
Anorexic	%	40.0	30.0
Bulimic	%	67.3	53.8
Obese	%	80.7	33.3
Obese-Bulimic	%	100.0	80.0
Bulimic-Anorexic	%	82.6	56.5

Table 11

Mall Survey

Unweighted percentage of eating disorders represented by each region.

Region	N	# ED	% of Region	Unweighted % of Region[a]
Victoria	537	71	13.2	14.4
North Van. Isl.	73	12	16.4	17.9
Greater Vancouver	89	24	27.0	29.4
Okanagan-Koot.	238	37	15.9	17.3
North	104	20	19.2	21.0
	1041	164	91.7	100.0

[a]Adjusted for sample size differences.

Table 12

Mall Survey

Percentage of total number of eating disorders represented by each eating disorder within each region.

	Eating Disorder				
	Anorexia	Bulimia	Obese	Obese Bulimic	Bulimic Anorexic
Victoria	2.23	3.91	1.49	5.03	0.56
N. Van. Isl.	1.37	6.85	0.00	5.48	2.74
Vancouver	1.12	7.87	6.74	10.11	1.12
Ok-Kootenay	1.81	5.45	3.63	4.54	0.45
North	1.92	4.81	0.96	8.65	2.88

Table 13

High-Risk Populations Survey

Age, height, weight and body mass index (BMI) for ballet school sample.

	N = 18 females		
	$\bar{X}$	SD	Range
Age (years)	16.9	5.3	9.0
Height (m)	1.64	.07	.25
Weight (kg)	50.0	7.1	25.4
BMI[a]	18.6	2.6	9.4

[a] BMI = Weight (kg) / Height^2 (m^2)

Table 14

High-Risk Populations Survey

Age, height, weight and body mass index (BMI) for modelling agency sample.

	Overall	Male	Female
N =	24	11	13
Age (years)			
$\bar{X}$ =	26.3	27.7	24.9
SD =	8.5	7.4	7.7
Height (m)			
$\bar{X}$ =	1.76	1.82	1.70
SD =	.06	.05	.05
Weight (kg)			
$\bar{X}$ =	66.1	78.8	54.4
SD =	13.1	8.4	7.1
BMI[a]			
$\bar{X}$ =	21.3	23.8	18.8
SD =	4.2	2.1	2.3

[a] BMI = Weight (kg) / Height^2 (m^2)

Table 15

High-Risk Populations Survey

Age, height, weight and body mass index (BMI) for diabetes clinic sample.

	Overall	Male	Female
N =	6	3	3
Age (years)			
$\bar{X}$ =	15.3	16.0	14.7
Range[a] =	3.0	2.0	1.0
Height (m)			
$\bar{X}$ =	1.71	1.79	1.63
Range =	.23	.11	.08
Weight (kg)			
$\bar{X}$ =	58.3	61.1	55.5
Range =	11.3	11.3	0.5
BMI[b]			
$\bar{X}$ =	19.9	19.1	20.9
Range =	3.8	3.8	2.1

[a] The small sample size does not warrant use of SD as measure of varibility.

[b] BMI = Weight (kg) / Height^2 (m^2)

Table 16

High-Risk Populations Survey

Age, height, weight and body mass index (BMI) for fitness centre sample.

	Overall	Male	Female
N =	12	2	10
Age (years)			
$\bar{X}$ =	28.7	27.5	28.9
Range[a] =	24.0	5.0	19.0
Height (m)			
$\bar{X}$ =	1.65	1.70	1.64
Range =	.18	.10	.13
Weight (kg)			
$\bar{X}$ =	61.5	71.9	59.4
Range =	27.2	19.5	12.7
BMI[b]			
$\bar{X}$ =	22.6	24.9	22.1
Range =	10.0	3.9	7.4

[a] The small sample size does not warrant use of SD as measure of varibility.

[b] BMI = Weight (kg) / Height^2 (m^2)

Table 17

High-Risk Populations Survey

Age, height, weight and body mass index (BMI) for eating disorders support group sample.

	N = 7 females	
	$\bar{X}$	Range[a]
Age (years)	34.3	28.0
Height (m)	1.64	.25
Weight (kg)	58.8	22.7
BMI[b]	21.9	8.4

[a] The small sample size does not warrant use of SD as measure of variability.

[b] BMI = Weight (kg) / Height^2 (m^2)

Table 18

High Risk Populations Survey

Age, height, weight and body mass index (BMI) for normal, anorexic, bulimic and bulimic-anorexic respondents[a].

	Normal	Anorexic	Bulimic	Bulimic-Anorexic
N =	54	3	5	5
Age (years)				
$\bar{X}$ =	23.7	19.0	22.2	32.8
SD =	9.6	3.6	7.9	6.8
Range =	39.0	7.0	18.0	15.0
Height (m)				
$\bar{X}$ =	1.70	1.71	1.61	1.65
SD =	.09	.05	.10	.07
Range =	.36	.10	.25	.18
Weight (kg)				
$\bar{X}$ =	60.2	57.5	53.7	59.3
SD =	12.1	6.5	5.5	10.5
Range =	50.8	11.3	12.7	22.7
BMI[b]				
$\bar{X}$ =	20.8	19.7	20.7	21.8
SD =	4.2	2.2	2.1	3.8
Range =	17.6	3.8	4.8	8.2

[a] This sample contained no obese or obese-bulimic respondents.

[b] BMI = Weight (kg) / Height^2 (m^2)

Table 19

High-Risk Populations Survey

Age of onset, duration, sex, high and low body mass index (BMI) for eating disordered respondents[a].

		Anorexic	Bulimic	Bulimic Anorexic
Sex	M =	0	0	0
	F =	3	5	5
Age of onset (years)				
	$\bar{X}$ =	16.0	16.8	21.6
	Range =	13 - 21	13 - 25	13 - 32
Duration (years)				
	$\bar{X}$ =	1	5.6	11.2
	Range =	1 - 1	1 - 20	3 - 26
High BMI[b]				
	$\bar{X}$ =	22.6	22.3	29.5
	Range =	22.4 - 22.8	19.5 - 26.0	22.8 - 46.5
Low BMI[b]				
	$\bar{X}$ =	18.2	18.7	16.7
	Range =	16.1 - 20.3	16.8 - 20.6	13.3 - 18.2

[a] Total high-risk populations survey N = 67.

[b] BMI = Weight (kg) / Height^2 (m^2)

Table 20

High-Risk Populations Survey

Percentage of normal and eating disordered respondents reporting dieting/fasting, and vigorous exercise for weight control.

Group		Dieting/fasting	Exercise
Normal	%	29.1	41.8
Anorexic	%	100.0	100.0
Bulimic	%	100.0	100.0
Bulimic-Anorexic	%	60.0	20.0

Table 21

High-Risk Populations Survey

Self-reported frequency of eating pathology.

	Frequency per Month			
Group:	Normal	Anorexic	Bulimic	Bulimic Anorexic
Binge-eating	0.87	2.50	3.20	3.80
Vomiting	0.00	1.00	3.40	3.40
Laxative use	0.00	0.67	0.00	2.80
Diuretic use	0.13	0.33	0.60	1.20
"Other"	1.00	0.00	2.80	1.80

Table 22

Hospital Utilization Data

Number of hospital bed days utilized by and cases diagnosed for each type of eating disorder in each region[a].

Eating disorder:		Anorexia	Bulimia	Obesity
Vancouver	Days -	14 920	4 150	17 970
	Cases -	462	146	1 694
Vancouver Isl.	Days -	6 070	940	7 020
	Cases -	167	36	628
Kootenay	Days -	460	180	2 300
	Cases -	26	19	242
Okanagan	Days -	3 910	1 440	4 940
	Cases -	98	49	536
North	Days -	1 360	920	5 980
	Cases -	61	35	668

[a] April 1, 1983 to March 31, 1988.

Table 23

Hospital Utilization Data

Number of hospital bed days utilized by and cases diagnosed for each type of eating disorder in each age group.[a]

Eating disorder:		Anorexia	Bulimia	Obesity
19 and under	Days -	11 686	1 901	1 319
	Cases -	334	96	157
20 to 49	Days -	13 824	5 662	19 302
	Cases -	400	180	2 205
50 and over	Days -	1 529	107	17 909
	Cases -	80	9	1 406
Total	Days -	27 039	7 670	38 530
	Cases -	814	285	3 769

[a] April 1, 1983 to March 31, 1988.

Table 24

Hospital Utilization Data

Average number of hospital bed days per case for each type of eating disorder within each age group.[a]

Eating disorder:		Anorexia	Bulimia	Obesity
19 and under	Days/case	35.0	19.8	8.4
20 to 49	Days/case	34.6	31.5	8.8
50 and over	Days/case	19.1	11.9	12.7
Overall	Days/case	32.8	26.9	10.2

Table 25

Hospital Utilization Data

Number of hospital bed days utilized by and cases diagnosed for each type of eating disorder at each target hospital[a].

Eating disorder:		Anorexia	Bulimia	Obesity
St. Paul's	Days -	4 117	4 771	6 644
	Cases -	111	126	645
BCCH	Days -	2 841	25	191
	Cases -	79	7	28
UBC HSC	Days -	3 440	54	357
	Cases -	56	1	45
Shaughnessy	Days -	2 656	213	793
	Cases -	45	4	79
Kelowna	Days -	2 897	1 189	1 096
	Cases -	59	36	164

[a] April 1, 1983 to March 31, 1988.

Table 26

Physicians' Survey

Results of overall survey on physicians' referrals of eating disordered patients over 12 month period.

Respondents = 83

Total number of reported cases:

Anorexia nervosa - **124**
Bulimia nervosa - **202**
Morbid obesity - **379**

Average number of cases per physician:

Anorexia nervosa - **1.49** (range = 0 to 12)
Bulimia nervosa - **2.43** (range = 0 to 15)
Morbid obesity - **5.57** (range = 0 to 20)

Patient age (years):	Average	Range
Anorexia nervosa -	21.1	12 - 50
Bulimia nervosa -	23.6	12 - 50
Morbid obesity -	38.7	12 - 80

Percent of patients referred:	Assessment	Treatment
Anorexia nervosa -	57.8%	40.5%
Bulimia nervosa -	39.8%	42.1%
Morbid obesity -	33.0%	37.5%

Table 27

Physicians' Survey

Percentage of eating disordered patients referred by family physicians to treatment resources, and average length of wait for treatment/assessment.

Referrals to health professionals:

	% Cases	Avg. Wait (wks)
Psychiatry -	42.3	10.6
Pediatrics & Internal Med. -	15.6	6.7
Psychology -	7.1	3.3
Dietitian -	45.6	3.4
Eating Disorder Clinic -	28.2	10.9
Inpatient Unit -	.8	12.0
Mental Health -	7.1	5.8
Overall average wait -		7.5

Table 28

Physicians' Survey

Results of **Greater Vancouver** region survey on physicians' referrals of eating disordered patients over 12 month period.

Respondents = 45

Total number of reported cases:

Anorexia nervosa - **58**
Bulimia nervosa - **109**
Morbid obesity - **239**

Average number of cases per physician:

Anorexia nervosa - **1.29** (range = 0 to 12)
Bulimia nervosa - **2.42** (range = 0 to 15)
Morbid obesity - **5.31** (range = 0 to 20)

Patient age (years):	Average	Range
Anorexia nervosa -	21.2	12 - 50
Bulimia nervosa -	26.6	12 - 50
Morbid obesity -	35.5	12 - 80

Percent of patients referred:	Assessment	Treatment
Anorexia nervosa -	76.3%	79.3%
Bulimia nervosa -	52.5%	59.8%
Morbid obesity -	36.2%	52.6%

Referrals to health professionals:

	% Cases	Wait (wks)
Psychiatry -	43.3%	11.0
Pediatrics & Internal Med. -	14.5%	7.0
Psychology -	9.1%	3.5
Dietician -	65.3%	3.5
Eating Disorder Clinic -	39.6%	11.0
Inpatient Unit -	.8%	12.0
Mental Health -	7.1%	6.0

Overall average = 7.2

Table 29

Physicians' Survey

Results of **Okanagan** region survey on physicians' referrals of eating disordered patients over 12 month period.

Respondents = 24

Total number of reported cases:

Anorexia nervosa - **23**
Bulimia nervosa - **24**
Morbid obesity - **90**

Average number of cases per physician:

Anorexia nervosa - **0.96** (range = 0 to 2)
Bulimia nervosa - **1.00** (range = 0 to 4)
Morbid obesity - **3.75** (range = 0 to 14)

Patient age (years):	Average	Range
Anorexia nervosa -	19.9	10 - 30
Bulimia nervosa -	23.1	14 - 35
Morbid obesity -	40.4	14 - 65

Percent of patients referred:	Assessment	Treatment
Anorexia nervosa -	32.5%	22.5%
Bulimia nervosa -	30.0%	20.9%
Morbid obesity -	9.0%	15.5%

Referrals to health professionals:

	% Cases	Wait (wks)
Psychiatry -	45.0%	6.5
Pediatrics & Internal Med. -	1.0%	0.0
Psychology -	12.0%	0.0
Dietician -	32.5%	1.7
Eating Disorder Clinic -	0.0%	-
Inpatient Unit -	4.0%	0.0
Mental Health -	9.0%	12.0

Overall average = 3.5

Table 30

Physicians' Survey

Results of **Vancouver Island** region survey on physicians' referrals of eating disordered patients over 12 month period.

Respondents = 14

Total number of reported cases:

Anorexia nervosa - 43
Bulimia nervosa - 69
Morbid obesity - 50

Average number of cases per physician:

Anorexia nervosa - 3.07 (range = 0 to 14)
Bulimia nervosa - 4.93 (range = 0 to 40)
Morbid obesity - 3.57 (range = 0 to 10)

Patient age (years):	Average	Range
Anorexia nervosa -	22.0	14 - 43
Bulimia nervosa -	24.3	14 - 43
Morbid obesity -	31.8	20 - 70

Percent of patients referred:	Assessment	Treatment
Anorexia nervosa -	55.4%	41.8%
Bulimia nervosa -	31.1%	31.8%
Morbid obesity -	17.5%	12.9%

Referrals to health professionals:

	% Cases	Wait (wks)
Psychiatry -	53.9%	9.7
Pediatrics & Internal Med. -	4.3%	2.0
Psychology -	4.3%	1.7
Dietician -	48.2%	3.4
Eating Disorder Clinic -	10.4%	9.0
Inpatient Unit -	9.3%	2.0
Mental Health -	2.1%	3.1

Overall average = 4.4

Table 31

Dietitians' Survey

Services provided by dietitians to eating disordered clients in 12 month period.

Respondents = 25

Number of cases treated:

Anorexia nervosa - 118
Bulimia nervosa - 162
Morbid obesity - 135
Total - 415

Number of dietitians seeing any cases:

Anorexia nervosa - 23 (92%)
Bulimia nervosa - 23 (92%)
Morbid obesity - 21 (84%)

Average number of cases per dietitian:

Anorexia nervosa - 5.13 (range = 0 - 28)
Bulimia nervosa - 7.04 (range = 0 - 25)
Morbid obesity - 6.43 (range = 0 - 20)

Dietitians' waiting list:

Average waiting list = 4.0 weeks
range = 0 - 10 weeks

Dietitians' self-rating of adequacy of training for treating eating disordered patients:

Rate own training as adequate - 12 (48%)
Rate own training as not adequate - 13 (52%)

Table 32

Mall Survey

Percentage of eating disordered respondents to Mall Survey who sought treatment, found treatment available, and found treatment helpful.

Respondents who sought treatment:

	# ED	# Sought Tmt	% Sought Tmt
Anorexic	20	11	55.0
Bulimic	50	10	20.0
Bulimic-anorexic	23	19	82.6
Obese-bulimic	10	4	40.0

Respondents who found treatment available:

	# ED	# Found Tmt	% Found Tmt
Anorexic	20	12	60.0
Bulimic	50	7	14.0
Bulimic-anorexic	23	17	73.9
Obese-bulimic	10	5	50.0

Respondents who found treatment helpful:

	# Found Tmt	# Tmt Helpful	% Tmt Helpful[a]
Anorexic	12	6	50.0
Bulimic	7	5	71.4
Bulimic-anorexic	17	10	58.8
Obese-bulimic	5	3	60.0

[a] Note: Percentage represents number of respondents who found treatment helpful out of the number who found treatment available.

Table 33

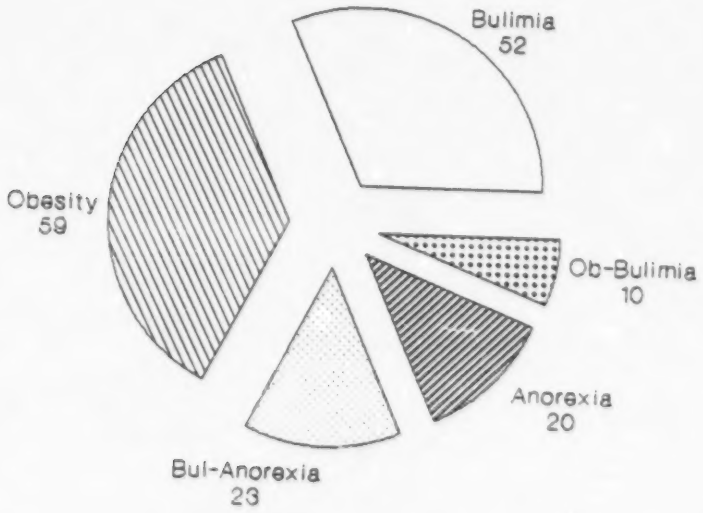
Eating Disorders Vital Statistics

Cases in which eating disorder was cited as primary cause of death.[a]

Disorder:	Obesity	Anorexia Nervosa	Bulimia Nervosa
Age Group			
< 20	-	-	-
20 - 49	1	-	-
50 - 69	15	-	-
70 +	11	2	-
Total	27	2	-

[a] April 1, 1987 to March 31, 1988.

Fig. 1 - Mall Survey Results
Number and Type of ED Reported



Total ED = 164

Fig. 2 - Mall Survey Results
- Frequency of Binge-Eating

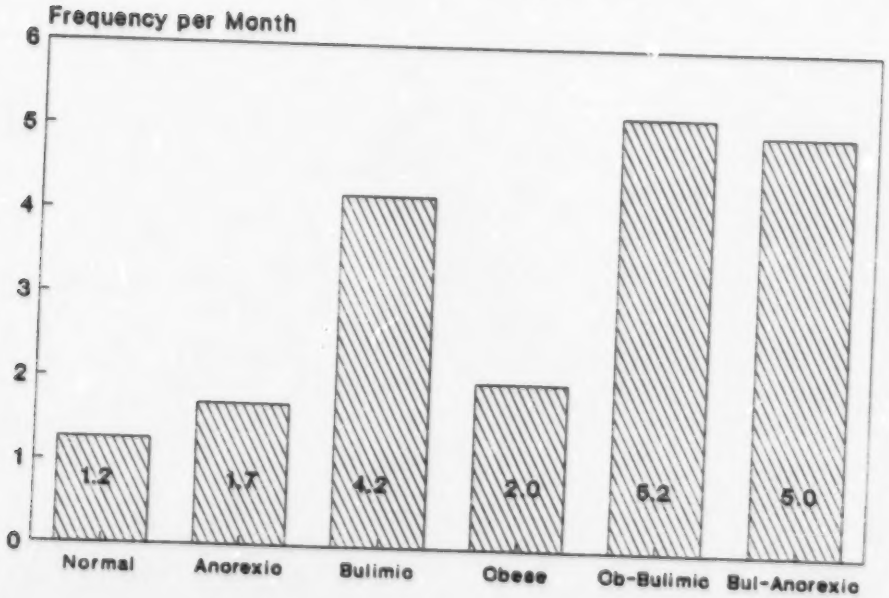


Fig. 3 - Mall Survey Results
- Frequency of Induced Vomiting

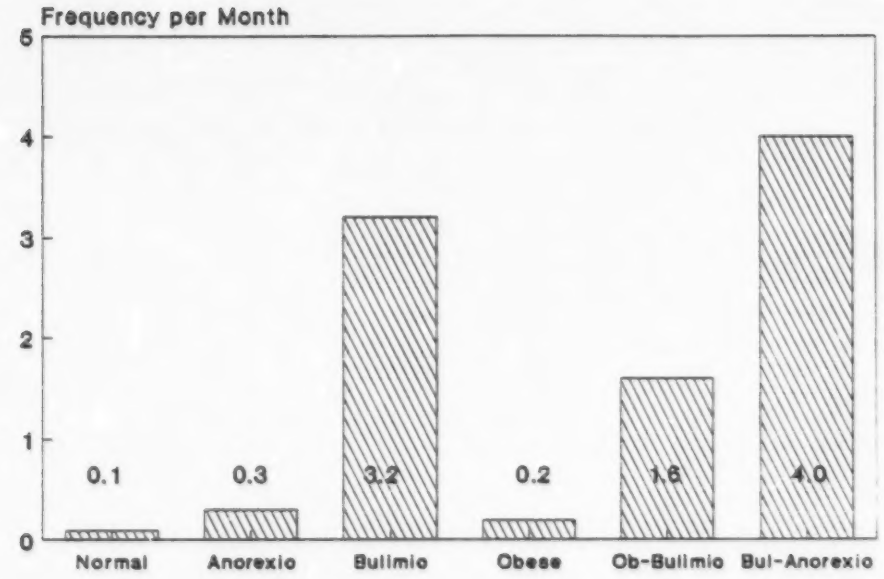


Fig. 4 - Mall Survey Results
- Frequency of Laxative Use

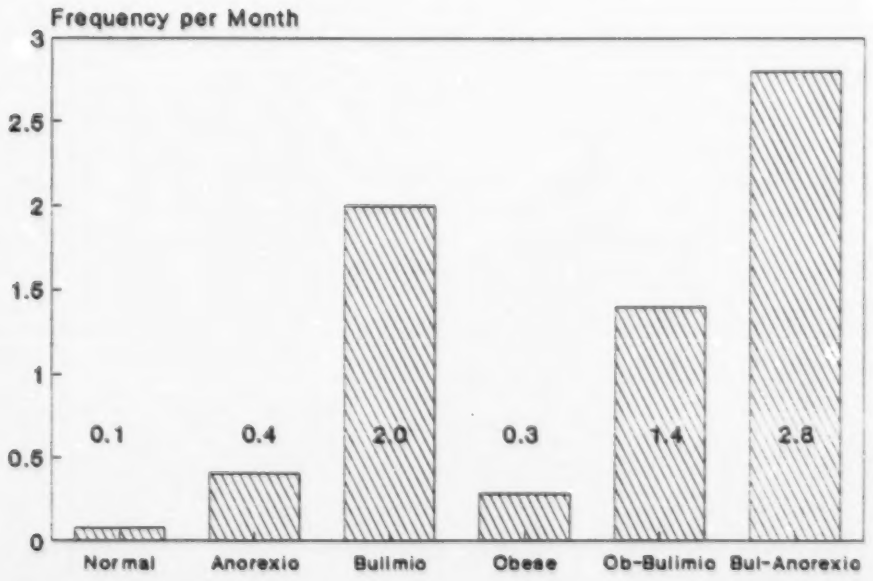


Fig. 5 - Mail Survey Results
- Frequency of Diuretic Use

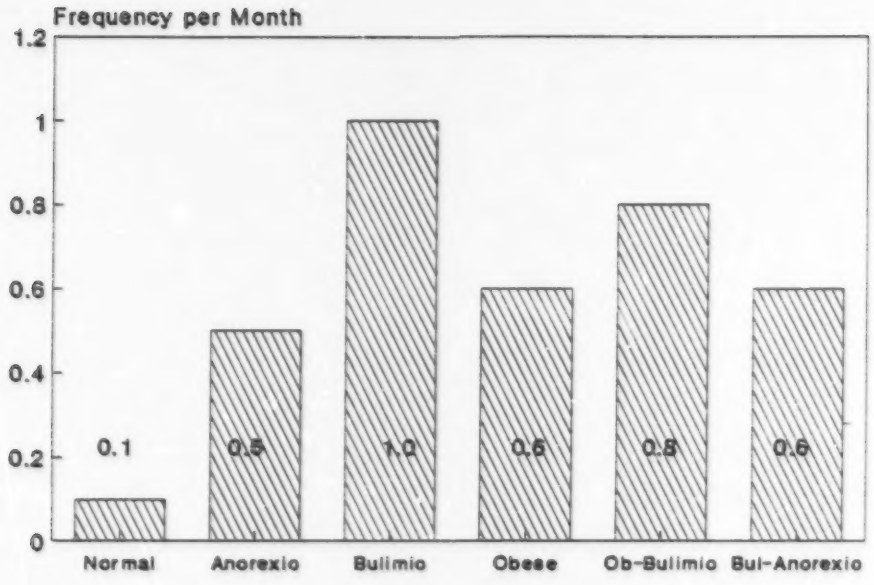


Fig. 6 - Mail Survey Results
- Frequency of Other Wt-Loss Techniques

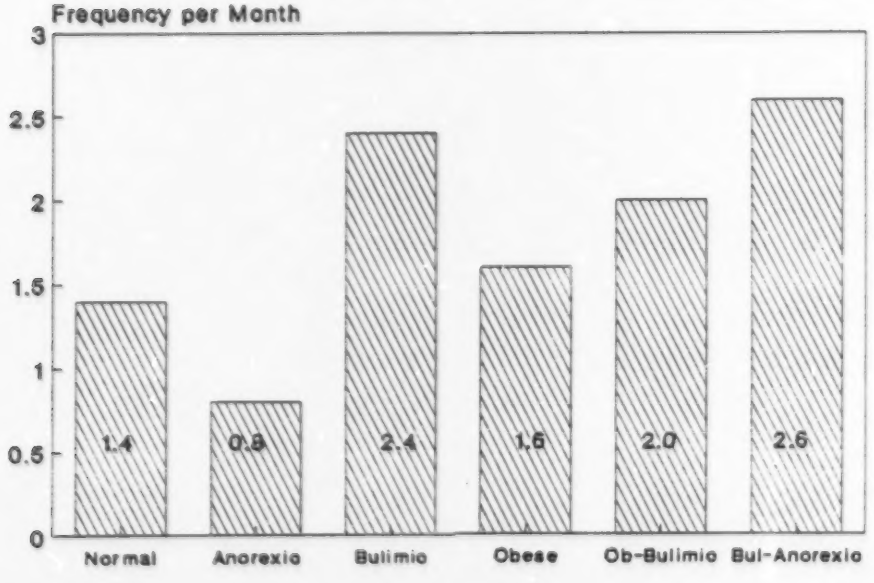
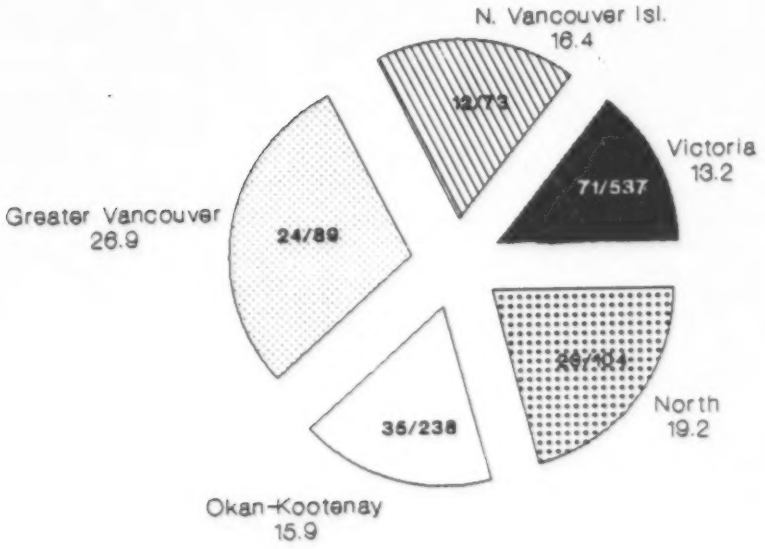
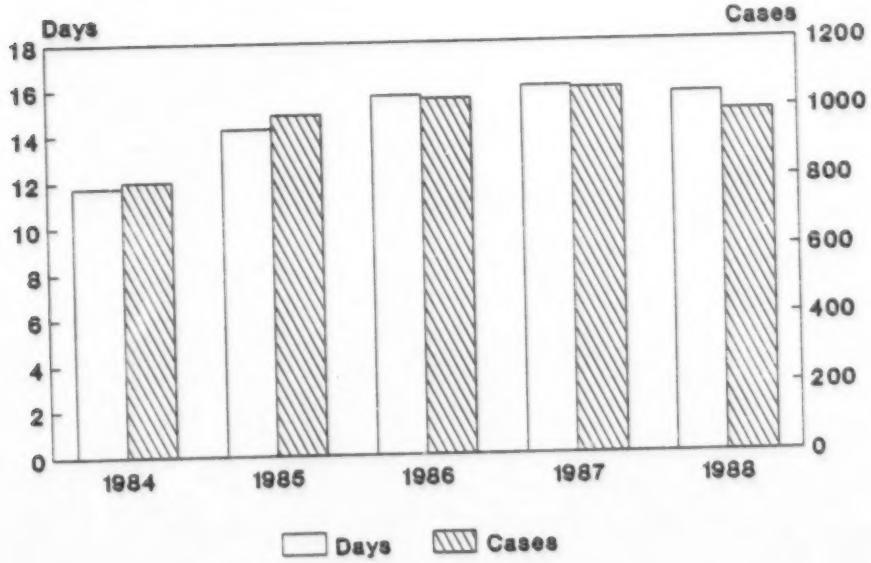


Fig. 7 - Percentage of Total Reported ED for Each Region in Mail Survey



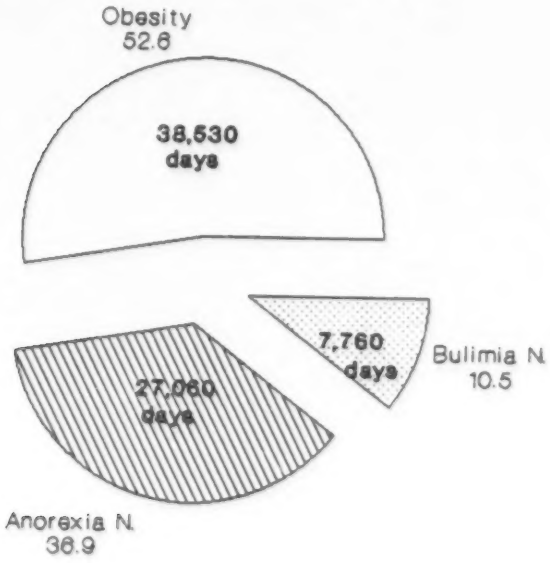
Adjusted for Differences in Sample Size

Fig. 8 - Number of Cases and Bed Days for All ED Patients by Year



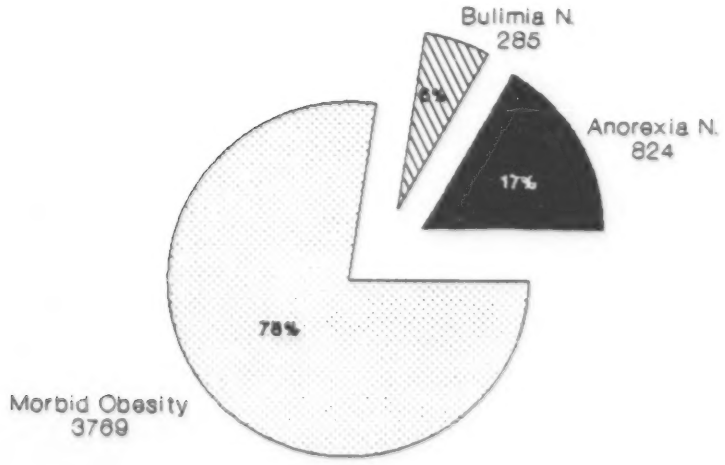
• Bed Days x 1000

Fig. 9 - Percentage of Bed Days Used by Each Type of ED, 1983-88



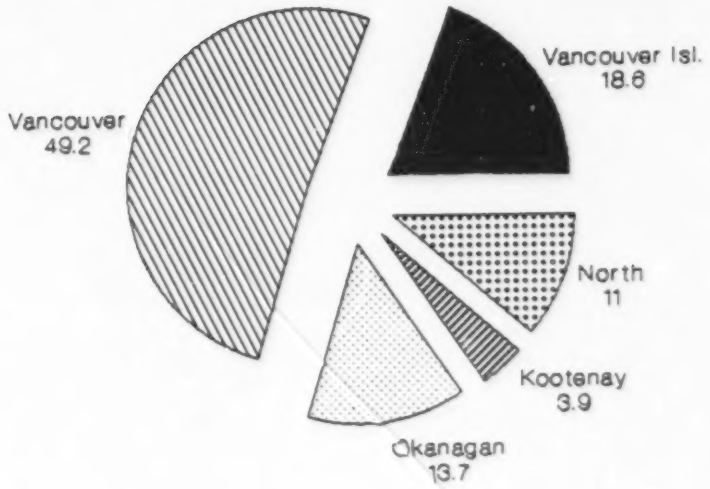
Total Bed Days - 73,260

Fig. 10 - Percentage of Total Cases Represented by each ED, 1983-88



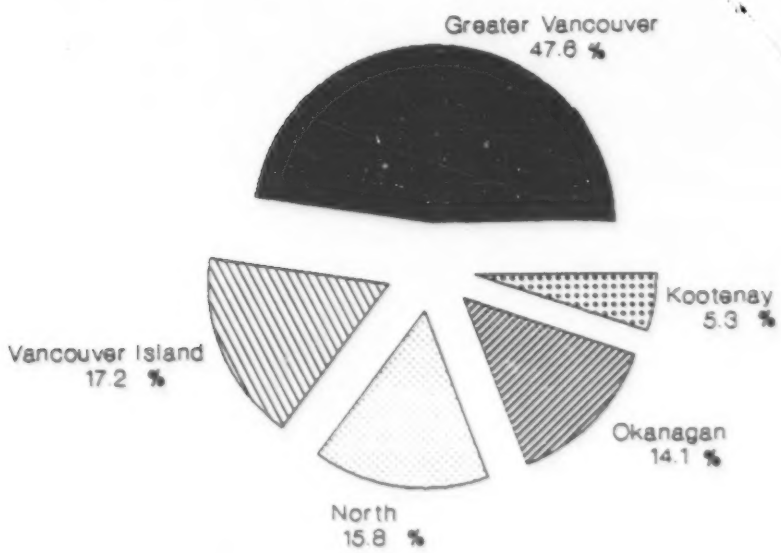
Total cases - 4835

Fig. 11 - Percentage of Bed Days Used by All ED in Each Region, 1983-88



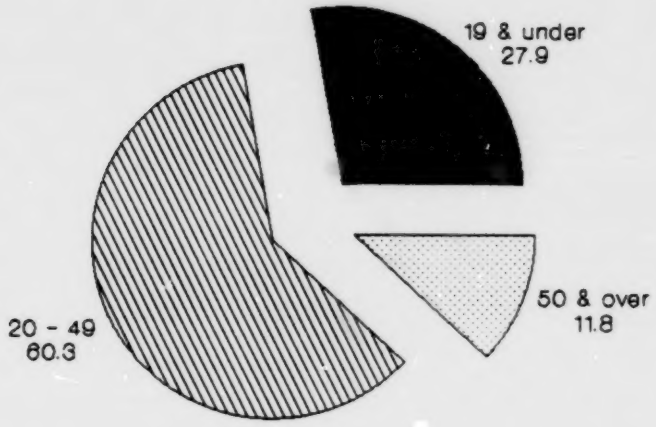
Total Bed Days = 73,260

Fig. 12 - Percentage of Cases of ED Reported in Each Region, 1983-88



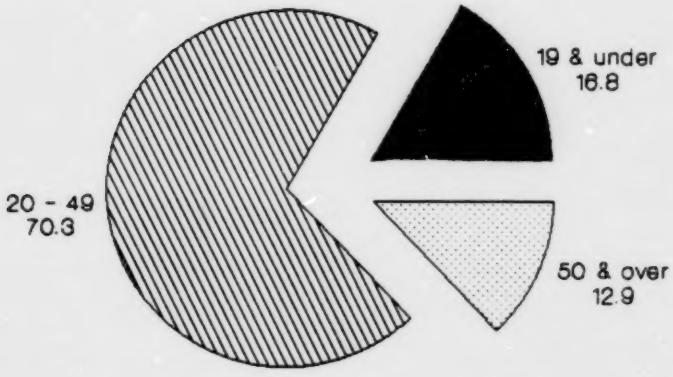
Total cases = 4835

Fig. 13 - Percentage of Bed Days Used by Each Age Group, 1983-88



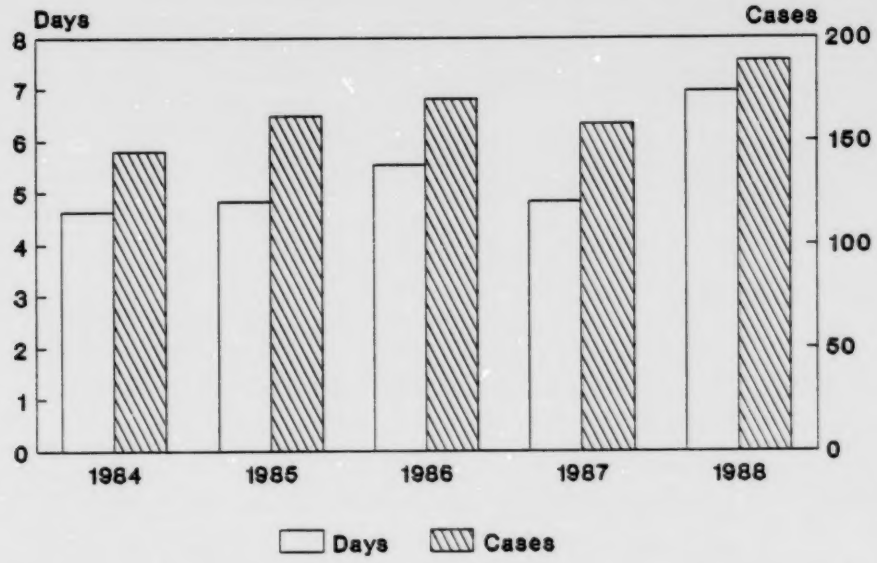
Principal diagnosis only

Fig. 14 - Percentage of Cases of ED within Each Age Group, 1983-88



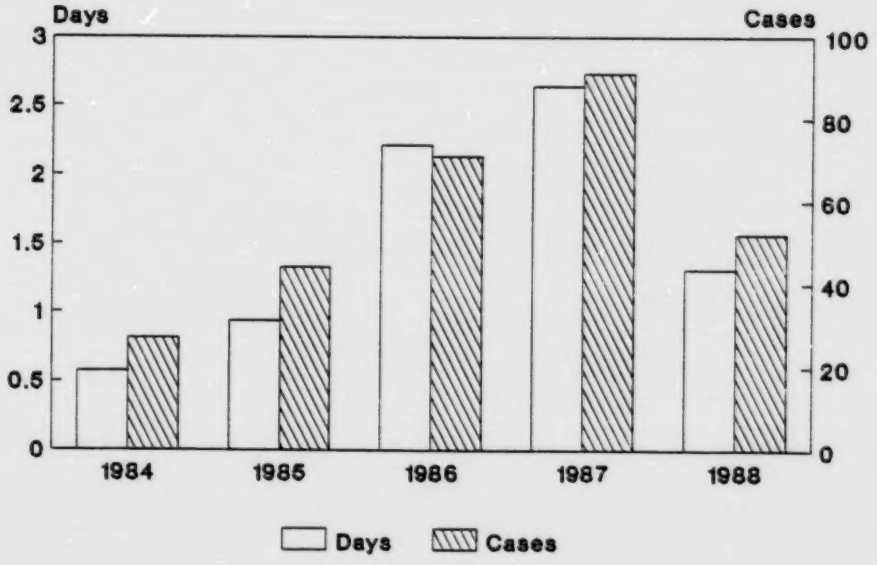
Principal diagnosis only

Fig. 15 - Number of Cases and Bed Days
Used by Anorexic Patients by Year



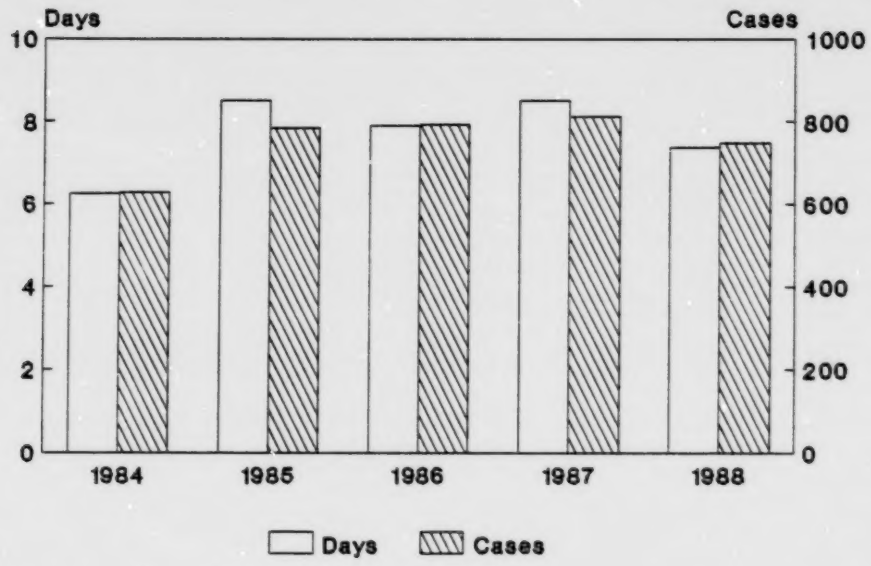
• Bed Days x 1000

Fig. 16 - Number of Cases and Bed Days
Used by Bulimic Patients by Year



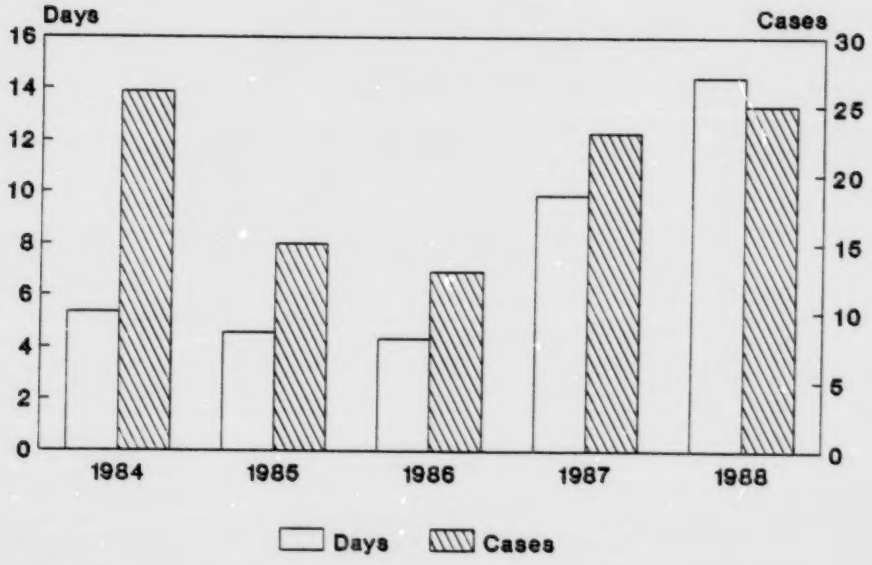
• Bed Days x 1000

Fig. 17 - Number of Cases and Bed Days
Used by Obese Patients by Year



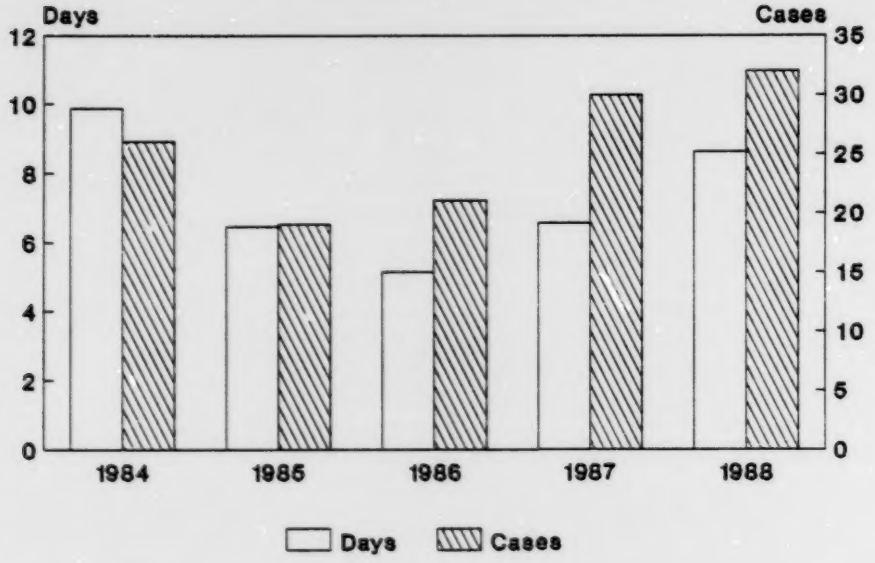
• Bed Days x 1000

Fig. 18 - Bed Days and Cases for All ED
- University Hospital UBC Site



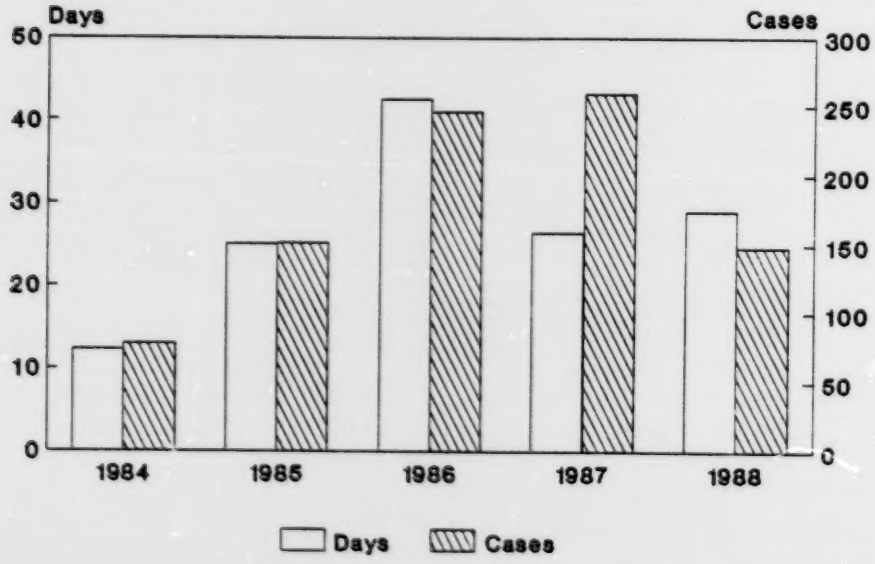
Bed Days x 100

Fig. 19 - Bed Days and Cases for All ED
- University Hospital Shaughnessy Site



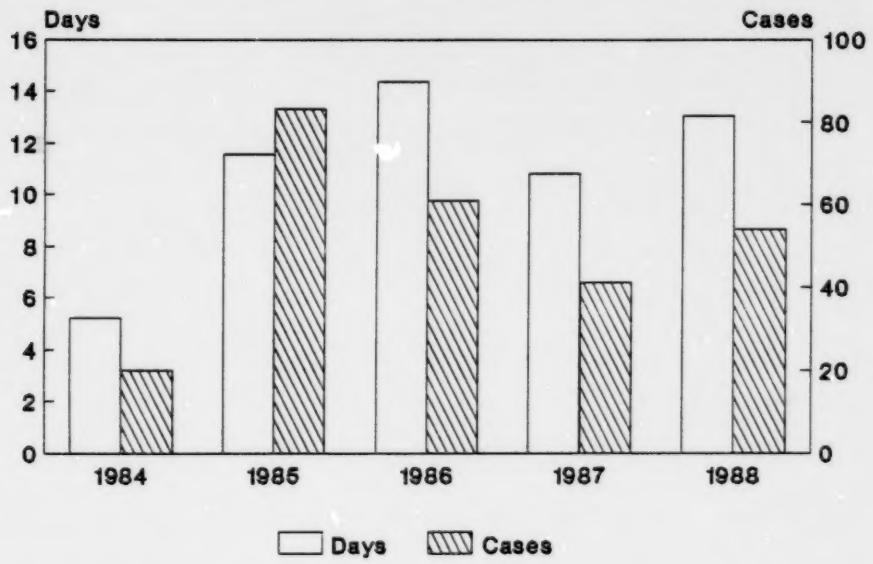
Bed Days x 100

Fig. 20 - Bed Days and Cases for All ED
- St. Paul's Hospital



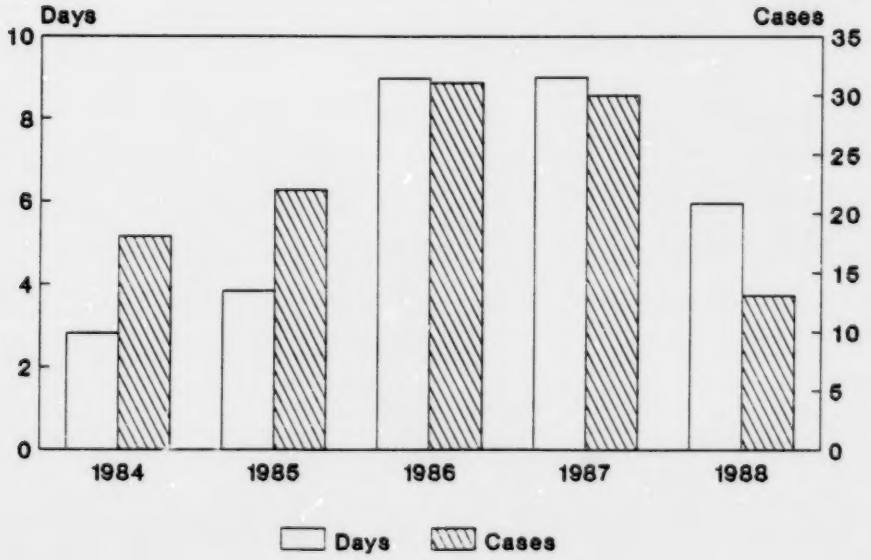
Bed Days x 100

Fig. 21 - Bed Days and Cases for All ED
- Kelowna General Hospital



Bed Days x 100

Fig. 22 - Bed Days and Cases for All ED
- B.C. Childrens' Hospital



Bed Days x 100

Appendix A
Eating Disorders Questionnaire

ID _____

McCreary Society Task Force on Eating Disorders

EATING DISORDERS QUESTIONNAIRE

This questionnaire contains a number of questions related to eating behavior and body weight.

Please take a few minutes to do the following:

1) **Fill in the information below.**
2) **Complete the questions on the other side.**
3) **Fold the form and place it in the box provided.**

NOTE: To ensure confidentiality, DO NOT PUT YOUR NAME ON THE FORM.

Complete the following as accurately as you can:

Age: _____ years

Height: _____ ft/in

Weight: _____ lbs

Sex: *Male* *Female*
(Circle one)

** PLEASE TURN OVER **

Appendix A
Eating Disorders Questionnaire

Page 2.

1. What is the LEAST you have weighed at your present height? . _____ lbs
2. How old were you at that time? . . . . . _____ yrs
3. What is the MOST you have weighed at your present height? (Excluding pregnancy) . . . . . _____ lbs
4. How old were you at that time? . . . . . _____ yrs
5. What weight would you most like to be? . . . . . _____ lbs

6. Do you have an intense fear of gaining weight or becoming fat? Yes No
7. Do you feel fat or feel that areas of your body are too fat? . . . Yes No
8. Do you diet or fast (not eat at all) to lose weight? . . . . . Yes No
9. Do you exercise vigorously to lose or prevent gaining weight? . Yes No

10. Indicate how often, if ever, you engage in the following:

0	1	2	3	4	5
Never	Once a month	Once a week	Twice a week	Once a day	More than once a day

- Binge-eating (rapid consumption of large amount of food):

0	1	2	3	4	5

- Self-induced vomiting (for weight control purposes):

0	1	2	3	4	5

- Laxative use to get rid of food:

0	1	2	3	4	5

- Diuretics (medication to reduce water retention):

0	1	2	3	4	5

- Please describe any other weight control techniques you use: _____

_____

How often?

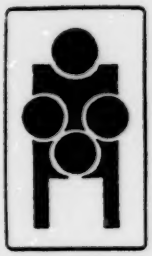
0	1	2	3	4	5

11. If you binge-eat, do you feel that your eating is out of control during a binge? . . . . . Yes No
12. Have you had at least 2 binges a week, on average, for the past 3 months? . . . . . Yes No
13. Females: Have you missed a period for 3 consecutive months for reasons other than pregnancy or disease? . . . . . Yes No
14. Have you ever suffered from Anorexia Nervosa? . . . . . Yes No

    If "Yes", at what age did it begin/end? _____ /_____ yrs
15. Have you ever suffered from Bulimia? . . . . . Yes No

    If "Yes", at what age did it begin/end? _____ /_____ yrs
16. If you have had either Anorexia Nervosa or Bulimia, did you seek treatment? . . . . . Yes No
17. Was there treatment available? . . . . . Yes No
18. Was it helpful? . . . . . Yes No

Appendix B
Physicians Questionnaire



THE McCREARY CENTRE SOCIETY

C/O SUNNY HILL HOSPITAL FOR CHILDREN • (604) 433-3491
3644 SLOCAN STREET, VANCOUVER, B.C. V5M 3E8 FAX 435-1452

Dear Colleague,

The McCreary Centre Society and the Ministry of Health have established a provincial task force to address the issue of eating disorders in B.C. The task force is charged with the responsibility of documenting the nature and extent of the problem; identifying existing treatment resources; and describing recognized and innovative treatment approaches.

The task force will consist of professionals from the various disciplines involved in the management of eating disorders as well as knowledgeable lay individuals. The task force will be making its report in late September 1989 and its recommendations will be forwarded to the government.

We would like to give you an opportunity to have input at an early stage of the task force's work. Simply write to me at the above address. Please feel free to encourage your patients to write as well.

We would like your help in garnering data on prevalence and types of problems (frustrations?) encountered. Tell us about your successes too. Add any extra comments you have on the back of the page and return to me.

(1) Which of the following conditions have you diagnosed or treated in the past 12 months?

Anorexia Nervosa	No of cases _____	Age Range _____ yrs
Bulimia	No of cases _____	Age Range _____ yrs
Morbid Obesity	No of cases _____	Age Range _____ yrs

(2) What percentage of diagnosed cases have you referred to someone else for assessment or treatment?

Anorexia Nervosa	Referred - Assessment	_____ %
	- Treatment	_____ %
Bulimia	Referred - Assessment	_____ %
	- Treatment	_____ %
Morbid Obesity	Referred - Assessment	_____ %
	- Treatment	_____ %

(3) Which of the following professional groups do you most frequently use to help you with the management of eating disorder patients?

Psychiatrist	in ___% of cases	average waiting list ___ wks
Pediat/Int Med	in ___% of cases	average waiting list ___ wks
Psychologist	in ___% of cases	average waiting list ___ wks
Dietician	in ___% of cases	average waiting list ___ wks
Eating Disorder Clinic	in ___% of cases	average waiting list ___ wks
Inpatient Unit	in ___% of cases	average waiting list ___ wks
Mental Health	in ___% of cases	average waiting list ___ wks

Yours sincerely,

Roger S. Tonkin, MD
Executive Director
McCreary Centre Society
433-0543

RST:dc

Volume

3

THE PROVINCIAL TASK FORCE

EATING DISORDER REPORT

VOLUME III - APPENDICES

Prepared for the Ministry of Health

By

McCreary Centre Society
3644 Slocan Street
Vancouver, BC V5M 3E8

September 1989

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Appendix A

McCreary Centre Society Progress Report

Under the terms of a contract drawn up between the McCreary Centre Society and the Minister of Health of the Province of B.C., the Society undertook the responsibility of providing leadership in the development of a coordinated response to the Minister's request for information and consultation on the nature and the extent of eating disorder problems in British Columbia. This mandate was received in March 1989, and the Society was asked to have its report in the Minister's hands within six months.

Terms of Reference

McCreary Centre Society

The Ministry is contracting with the Society to provide leadership to address the problems of people with eating disorders throughout British Columbia.

The contractor will provide reports to the Ministry on the following activities:

1. The development of a project reference committee which will advise on the needs of people with eating disorders, consulting on all aspects of the contracted services.

2. Based on the successful 1988 summer camp, develop further the summer program option for youngsters with eating disorders and provide an evaluation report for the Ministry.

3. Prepare a report for the Ministry of Health which outlines the scope of the problem of eating disorders, summarizes current research, outlines existing resources in British Columbia, identifies service delivery options which have been demonstrated successful and propose a framework for a Provincial intervention response and suggested strategies for implementation.

Contract Activities

Project Reference Committee

The Society established a project reference committee (Eating Disorders Task Force [EDTF]). The EDTF was chaired by Dr. R.S. Tonkin and consisted of 14 members representing various professional and lay constituencies with experience relevant to the problem of eating disorders within the province. These members were augmented by a group of observers, many of whom are directly involved in the treatment of those who suffer with eating disorders. Members of the EDTF (plus observers) attended a weekend retreat and served on various committees and subcommittees that met through the summer months.

Summer Camp

The Society expanded and improved upon its summer camp program (Camp Elsewhere). This camp, for adolescents at the extreme ends of the weight spectrum, was held over a six--week period during the summer. Project manager for the camp was Carrol Lundell, Secretary-Treasurer McCreary Centre Society. The camp program was under the supervision of Ms. Carolyn Hammond, nurse clinician at the Youth Clinic - B.C. Children's Hospital. The professional staff at B.C. Children's Hospital provided voluntary advisory support to the program while Ms. Hammond's time (two months) was paid for by the Society. Medical supervision was provided by Dr. R. Tonkin and included regular weekly visits to the campers. Staffing for the camp included: nurse clinician, a head counsellor, five counsellors, two counsellors in training (teens who are recovering from an eating disorder and have successfully completed a hospitalization-free year), and a camp assistant. Funding for these positions and the non-salary operating costs for the camp were derived from a Challenge '89 grant, the contract with the Ministry of Health, and camper fees. Four youngsters had their camp fees paid by an external agency (three by MSSH and one by the Keyes Foundation).

An evaluation of the camp undertaken by the project staff and reviewed by the EDTF is included as Volume III, Appendix C. The camp program was evaluated under the supervision of the Society's research coordinator (Daniel LeGoff). A medical student (Dawn Cheng) worked with the nurse clinician and the counsellors in order to obtain objective and subjective evaluations of camper behaviour (progress). Pre-camp and post-camp evaluations included the campers, their families, and a comparison group consisting of camp-eligible adolescents who did not go to the camp.

Status Report

Task Force Research: The Society does not undertake formal scientific research. However, its close links with the Department of Paediatrics at UBC and the Department of Psychology at SFU enabled it to benefit from the expertise and resources available to these university-based departments. The Society recruited a doctoral-level student in clinical psychology (Daniel LeGoff), whose responsibility it became to coordinate the work of the EDTF, to supervise the work of the summer students engaged in associated projects, to undertake an extensive review of the literature on eating disorders, and to develop epidemiologic data that could be used to document the extent of the problem in B.C. This full-time position extended over the period from April to September 1989 and was funded from the contract. A detailed research report is included as Volume II.

Research conducted by the EDTF included:

1. mailed questionnaires to physicians in B.C.
2. mall surveys in each region of the province
3. saturation surveying of professionals in a mixed rural-urban community on Vancouver Island
4. self-report questionnaire surveys of selected high risk groups
5. hospital utilization statistics

In developing the research component of the project, the Society accepted the limitations placed upon it by time and budget. It was felt that obtaining data from B.C. was essential to the fulfilment of our mandate, but it was recognized that any such data would have to be cautiously interpreted. A number of strategies were used in order to assess the actual scope of the problem of eating disorders in B.C. Some of these strategies - for example, the use of mall surveys - are open to criticism. Not all jurisdictions responded to requests for information, and in some instances the quality of the data available is suspect. These caveats notwithstanding, the EDTF feels that it has developed a reasonable measure of the extent of the eating-disorder problem in B.C. and takes some reassurance from the observation that the B.C. estimates resemble the prevalence data generated in other jurisdictions.

It was necessary to canvas the key professional groups involved in treating eating disorders in B.C., but it was also important to approach B.C. residents directly and to try to determine the level of their awareness and concern. The EDTF tried to establish whether or not there were regional differences in the prevalence or awareness of the problem. Measures of demand for and utilization of services were also sought.

Review of literature: An in depth and critical review of the entire eating-disorder literature was not considered appropriate to the purposes and time frame of the EDTF project. Instead,

a number of topic areas were focused upon. These included literature on incidence and prevalence, outcome studies, most frequently cited references on therapeutic approaches, descriptions and evaluations of innovative programs, and prevention studies.

The review of current research included an examination of the extent to which research is being conducted in B.C. Few publications in peer review journals have originated with B.C. researchers. A total of seven citations were noted. Of particular note is the lack of any epidemiologic data on provincial incidence trends, extent of chronic disability, or outcome evaluation. The lack of collaborative, interagency follow-up data was also noted.

Report Organization: The Society has prepared a report for the Ministry which includes the following topic areas:

- Executive Summary
- Introduction and Historical Perspective
- Nature of Eating Disorders
- Scope of the Problem
- Utilization of Resources
- Outline of Existing Resources
- Treatment Options
- Prevention Options
- Proposal for a Provincial Framework
- Recommendations
- Strategies for Implementation
- Appendices

Acknowledgements

In undertaking this task the Society has attempted to solicit public and professional opinion on the contemporary issues relating to the problem of treating eating disorders in each region of the province. This task would not have been accomplished in such a short time if it were not for a great deal of goodwill and help.

For their gracious cooperation and assistance in distributing the Eating Disorders Questionnaire to members of their respective organizations, the task force would like to thank the following:

Rose Finley, The Goh Ballet Academy
Debbie Firestone, The Fitness Place
Czesia Geddes, RN, BSW, Prince George Eating Disorders Support Group
Richard Hawley and Gerry Brown, Richard's Modelling and Talent Agency
Anne McKenzie, RN and Dr. W.J. Tze, B.C. Children's Hospital Diabetes Clinic

For their invaluable assistance in collecting data for the Mall Survey, giving up their time on weekends and evenings, and providing assistance and information to the public about eating disorders, the task force is indebted to:

Rose Adrian
Colleen Alexander
Jennifer Conway
Ann Cross
Kent and Rosalyn Elliott
Catherine Gibson
Roberta Hawbolt
Bonnie Heintzman
Joan Hryn
Leslie Hyslop
Pat Ishkanian
Vali Keeleran
Beatte Sharnowski

For allowing the task force to collect data and distribute information on eating disorders, and for assisting the research staff and volunteers in their respective shopping centres, we would like to extend our gratitude to:

Coquitlam Centre, Coquitlam
Duncan Mall, Duncan
Hillside Shopping Centre, Victoria
Lansdowne Shopping Centre, Richmond
Lougheed Mall, Burnaby
Orchard Park Shopping Centre, Kelowna
Park Royal Shopping Centre, North Vancouver
Pine Centre Mall, Prince George
Seven Oaks Shopping Centre, Abbotsford
Surrey Place Mall, Surrey
Tillicum Mall, Victoria
Village Green Shopping Centre, Vernon
Woodgrove Shopping Centre, Nanaimo

The task force owes a special thanks to the following health professionals who volunteered their time to assist in the process of data collection, organizing mall surveys, and soliciting volunteers:

Donna Antonishak, RDN
Bonnie Baxter, RDN
Helen Dubas, RDN
Czesia Geddes, RN, BSW
Sonya Kupka, RDW
Gail Retalleck, RN
Cathy Richards, BHE, RDN
Lorna Strong, RN
Ed Wigmore, MA Psych

The task force would like to thank the family physicians who completed the physician referral questionnaire and Donna Antonishak, Cathy Richards and Dr. Jean Swenerton (B.C. Federation of Medical Women in Canada) for their help in distributing and collecting questionnaires. We would also like to thank the dietitians who completed the dietitian's survey, and especially Sue Ross for her role in organizing and analyzing the survey.

Thanks are due to Linden Soles and CKVU Television for providing copies of a televised interview with Dr. Tonkin for use in the mall surveys.

The task force would like to thank Ms. Marilyn Gordon of B.C. Children's Hospital Housekeeping Office for her cooperation in providing the display unit for the mall surveys, and Ann Nelson, Chief Librarian at the Hamber Library for her and her staff's considerable effort in providing reference material on eating disorders.

Whenever possible, individuals and groups have been encouraged to submit written briefs or letters of opinion. In addition, the EDTF has benefited greatly from the perspective of Mr. Ed Wigmore, who has, through the auspices of the Fraser Valley - North Shore Region of provincial mental health services, done much to advance community-based treatment and support groups.

The Society owes much to the patience, support, and wise counsel of Dr. Walter Goresky and Dr. Keith Sigmundson in the Ministry of Health. The Division of Vital Statistics and the Research Division of Hospital Programs has been quite helpful with the provision of data on mortality and on hospital utilization. In addition, the Society owes a debt of gratitude to the Faculty of Medicine at UBC whose facilities and support services enabled us to complete the task within such a short time frame. The late Dr. Don Hill (Department of Paediatrics) gave moral support to the endeavour, and the staff of the Hamber Library helped us wade through mounds of literature. The Camp Elsewhere staff (under Carolyn Hammond) and the staff of Surf Lodge (manager Margaret Halliday) played an important role in helping us fulfil one of the contract mandates.

The Society staff (researcher Daniel LeGoff, administrative secretary Donna Chin, medical students Dawn Cheng and Alan Burgmann, and computer specialist Ivan Li) have worked hard to produce the information behind this report. Production of this report has been the responsibility of Maggi Bailey whose tireless efforts are much appreciated. Mr. Jim Wright served as editorial consultant during the production phase.

The biggest thank you and most important acknowledgement must go to the members of our Task Force and its various committees. These already-busy individuals gave freely of their time and expertise. Their energy and experience is reflected in this report and hopefully stands as a testimonial to their commitment to bettering the lives of the thousands of B.C. residents who suffer from one or other form of eating disorder.

Appendix B

Eating Disorders Task Force

Committee Members:

Sandra Bressler - (B.O.T., Reg OT(BC)) Director, Occupational Therapy, B.C. Children's Hospital
Kathy Cadenhead - (BHEc, MD, CCFP) Chair, BCMA Nutrition Committee
Kent Elliott - (BCom, MBA) Youth Clinic Parent Support Group
Richard Freeman - (BSc, MA, PhD) Dept. of Psychology, Simon Fraser University
Ian Gillespie - (MD, FRCPC, DABPN) Dept. of Psychiatry, Royal Jubilee Hospital
Elliot Goldner - (MD, FRCPC) Director, Eating Disorder Clinic, University Hospital - UBC Site
Ian Hall - (RN, MA) Head Nurse, Psychiatry Dept., St. Paul's Hospital
Helga Hicks - (MSW) Director of Support Services, Greater Vancouver Mental Health Services
Paul Latimer - (MD, PhD, FRCPC) Psychiatrist, Kelowna
Beverley McLagan - (MA) Co-founder, Vice-Pres., Cdn. Assoc. of Anorexia Nervosa and Associated Disorders
Brian Morris - (MD, FRCPC) Dir. of Outpatient Psychiatry, Dir. of General Psychiatry, St. Paul's Hospital
Sue Ross - (MSc, RDN, CHE, FCDA) Food & Nutrition Services, University Hospital - UBC Site
Derryck Smith - (MD, FRCPC) Head, Dept. of Psychiatry, B.C. Children's Hospital, Dept. of Psychiatry, UBC
CHAIRMAN: Roger Tonkin - (MD, FRCPC) Head, Div. Adolescent Health, Dept of Paediatrics, UBC

Invited Observers

Laird Birmingham - (BSc., MD, FRCPC, FACP, ABIM) Director of Div. of Internal Medicine, St. Paul's Hospital, Director of Post Graduate Training Program, Dept. of Medicine, UBC
Sonia Chrysomilides - (MSE) Director, Nutrition Service Department, St. Paul's Hospital
Arnold Cohen - (BA, MSW) Manager, Jack Ledger House, Arbutus Society for Children
Lorraine Hathaway - (MSW) Senior Socal Worker, Dept. of Psychology, University Hospital - UBC Site
Linda Lauritzen - (RN, BSN) Admission Coordinator, Outpatient Psychiatry, University Hospital - UBC Site
Keith Sigmundson - (MD, FRCPC) Provincial Consultant, Child Psychiatry, Ministry of Health, Province of B.C.
Toby Silverton - (MA) Co-founder, President, Cdn Assoc. of Anorexia Nervosa and Associated Disorders
Ed Wigmore - (MA) Psychologist, Team Coordinator, Surrey Mental Health Centre

Support Staff

Administrative Secretary - Donna Chin
Research Coordinator - Daniel LeGoff (BA Hon., MA)

Terms of Reference

To advise and assist the McCreary Centre Society in fulfilment of its mandated role.

In so doing the Task Force members will be asked:

1. **to cooperate with the Society in the generation of a detailed list of available treatment resources in B.C.**

2. **to assist project staff in the generation of B.C. data on utilization, demand, and prevalence for eating disordered individuals**

3. **to assist in the development of a literature review on the prevalence, assessment, and treatment of sufferers and their families**

4. **to discuss and debate present and future treatment modalities, including possible alternative forms of treatment**

5. **to present recommendations for inclusion in the McCreary Centre Society's final report to the Ministry of Health, Province of B.C.**

6. **to critically review the final report, with special reference to: the documentation of prevalence, demand and resources available; the evaluation of the summer camp project; the discussion and recommendations on treatment and/or other recommendations.**

Task Force Guidelines

The Task Force represents an opportunity to provide Ministry officials with a consensus on the future directions that the treatment of eating disorders in B.C. might take. Our purpose is not to deliver an extensive and intensive report but to do the best we can within the time frame and budget allotted to us. It is a next step rather than final destination, an opportunity for input rather than a promise of funds. The McCreary Centre Society has accepted the challenge of the project on the understanding that it was a convenient way for us to begin to work together towards the betterment of these sufferers, their families, and the professionals who are called upon to care for them.

Organization

The members need to discuss the following topics:

- **discipline vs topic area approach**
- **subcommittee structure/function**
- **liaison and feedback to institution or discipline**
- **preparation of report/recommendations**
- **deadlines/future meetings**
- future action

Central Issues

The following are suggestions of issues for debate:

- central (single) unit vs decentralized
- alternative modes of treatment
- non-hospital care programs
- local and regional approaches to care
- prevention of chronicity
- promoting healthy weights and non-diets
- education/training of professionals
- research and program evaluation

Areas that need to be documented and discussed in some detail include:

- Nutrition and medical management
- Psychiatric and/or non-psychiatric Rx
- Role of mental health professionals
- Overlapping (duplication) roles
- Underutilized disciplines
- Self help/support groups
- Costs/benefits

Committee Structure and Membership

At the time of the EDTF retreat a number of the essential features of a provincial framework were identified and discussed. Principles of intervention were enunciated and directions for future development considered. A number of committees and subcommittees were set up. These committees produced their reports in the form of a set of recommendations. These

reports are presented in full in this appendix and most of their recommendations are included in the main report.

Committee Reports and Recommendations

Treatment Committee

Members: Laird Birmingham, Sandra Bressler, Arnold Cohen, Richard Freeman, Ian Gillespie, Elliot Goldner, Ian Hall, Helga Hicks, Paul Latimer, Susan Leung, Karen Malfesi-Merritt, Sue Ross and Ed Wigmore

Chair: Elliot Goldner

Introduction: In keeping with the philosophy of the Ministry of Health, treatment of individuals with eating disorders should operate upon the following basic principles:

1. Access to treatment shall be universal for all affected individuals in British Columbia;

2. Treatment shall be holistic and community-based, utilizing a cooperative multi-disciplinary approach;

3. Continuity of care between various acuity levels shall be maintained;

4. The minimal treatment necessary for effective care shall be provided by appropriate resources;

5. Treatment shall be supplied as close to the patient's community as possible.

Overall Plan: Based on the above basic principles, the following overall plan is proposed:

Treatment would be provided by regional treatment centres developed in each of the five macroeconomic regions of the province (Vancouver City, Lower Mainland, Vancouver Island, Okanagan-Kootenay, North). Each regional team would be responsible for the treatment of patients with eating disorders within the appropriate catchment area.

New cases should receive an initial assessment by a clinician trained in the diagnostic evaluation of eating disorders. In order to be fully assessed by a regional treatment team, patients would be required to meet diagnostic criteria for anorexia nervosa, bulimia nervosa or morbid obesity.

Treatment would consist of a range of services, most of which would be provided on an outpatient basis by a multidisciplinary health care team. Inpatient treatment would be reserved for patients with medical compromise, significant malnutrition, acute suicide risk and

complicated psychiatric problems. Community resources would be strengthened (e.g. residential treatment facilities, support groups) so that, wherever possible, patients would be referred back to the community for treatment.

Treatment components would be developed in order to meet special needs of specific subgroups of patients with eating disorders (e.g., young children, patients with diabetes mellitus).

Regional Centres: Each regional centre should make provision for the following areas of management:

1. early detection of new cases
2. standard diagnostic assessment
3. medical and psychiatric inpatient treatment
4. nutritional rehabilitation
5. partial hospitalization (i.e., evening and day-care programs)
6. residential treatment
7. psychosocial treatment (i.e., psychotherapy, family and marital treatment, group treatment)
8. continuing education for health care professionals and community members

Provincial Centres: In addition, provincial centres would be established in order to provide the following:

1. treatment of complicated cases unmanageable in the regional centres
2. specific treatment interventions unavailable in any other facilities in the province (e.g. gastrointestinal surgery for morbid obesity)
3. research and program evaluation
4. advanced training of health care professionals
5. consultation to each regional centre
6. travelling treatment teams to areas of the province not yet served by a regional centre

The provincial centres would also serve as regional treatment centre for patients living within the catchment area.

The provincial centres could be established within existing institutional frameworks (e.g., a university department or hospital) but should be administratively and programmatically distinct and should have a multiconstituent advisory committee. Each centre would require adequate space to provide for research and teaching as well as exemplary comprehensive patient care.

Given that existing treatment centres have developed specialized clinical, teaching, and research activities in affiliation with the University of British Columbia, provincial centres would be developed by adding resources to the following sites: B.C. Children's Hospital, Sunny Hill Hospital, St. Paul's Hospital, and University Hospital - UBC site. Development of resources

among the existing centres should result in an integration of programs and maximal use of existing physical and manpower resources.

Recommendations

1.1 Treatment should be delivered primarily via hospital-affiliated, community-based regional treatment teams each charged with providing services to a clearly defined catchment population with backup support from provincial centres which supply limited specialized services.

1.2 Each regional team should have the capacity to provide a full range of services to patients and families within the catchment area.

1.2.1 Each Regional team should provide intensive outpatient treatment to children and adults within their catchment population.

1.2.2 Each Regional team should consult to inpatient units within their catchment area to assist in the provision of inpatient treatment services.

1.2.3 Each Regional team should provide partial hospitalization services (including day, evening, and night programs) to children and adults within their catchment population.

1.2.4 Each Regional team should consult to residential treatment facilities within their catchment area to assist in the provision of residential treatment.

1.2.5 Each Regional team should provide a telephone hot-line service for health care professionals in the catchment region.

1.3 Each regional centre should be able to provide support services to communities within the regional catchment area.

1.3.1 A resource coordinator position should be developed in order to coordinate services within the region.

1.3.2 The function of the resource coordinator would include: the coordination of hospital and community services, the facilitation of family and patient support groups, education of health care professionals, and affiliation with community schools.

1.4 Each regional treatment team should be staffed by professionals from a range of health disciplines with clinical leadership provided by a physician.

1.4.1 The physician team-leader should have expertise in the area of eating disorders and should provide a link between community services and hospital treatment.

1.4.2 Teams should be staffed by professionals from the following health disciplines: Medicine, Nursing, Social Work, Dietetics, Rehabilitation Medicine, and Psychology.

1.4.3 Sufficient numbers of designated staff with specific training in eating disorders should be allocated in order to compose an integrated multidisciplinary team.

1.5 Regional treatment teams should be developed in the following five macroeconomic regions: 1) The Lower Mainland, 2) Vancouver Island, 3) Okanagan-Kootenay regions, 4) Vancouver City and 5) the North.

1.5.1 Regional treatment teams should be developed by adding to existing resources wherever possible.

2.1 Provincial centres should be developed which provide specific services not available through regional treatment centres.

2.1.1 Provincial centres should provide specialized services for children and adults with complicated disorders which cannot be managed by regional teams.

2.1.2 Provincial centres should provide specialized treatment interventions unavailable elsewhere in the province (e.g. gastrointestinal surgery for morbid obesity).

2.1.3 Provincial centres should conduct eating disorders research and program evaluations.

2.1.4 Provincial centres should provide consultative services to each regional centre.

2.1.5 Provincial centres should provide travelling treatment teams to areas of the province not yet served by a regional centre.

2.2 Provincial centres should be developed by adding resources to existing centres at B.C. Children's Hospital, Sunny Hill Hospital, St. Paul's Hospital, and University Hospital - UBC Site.

2.2.1 A Provincial centre for the treatment of children and adolescents with eating disorders should be developed at Sunny Hill Hospital in conjunction with B.C. Children's Hospital.

2.2.2 Provincial centres for the treatment of adults with eating disorders should be developed at St. Paul's Hospital and University Hospital - UBC Site.

3.1 Specialized resources should be developed to meet the special needs of certain subgroups of patients with eating disorders.

3.1.1 Children and adolescents with eating disorders should be treated in a setting which is appropriate to their developmental needs.

3.1.2 Alternative treatment modalities for children and adolescents with eating disorders, such as summer treatment camps and care-by-parent units, should be explored.

3.1.3 Tertiary assessment services should be available for young children (ages 12 and under).

3.1.4 Appropriate treatment should be available to patients with morbid obesity.

3.1.5 Appropriate treatment should be available for patients with specific medical conditions (e.g., diabetes mellitus, cystic fibrosis, pregnancy) which become complicated by eating disorders.

3.1.6 Treatment services should be readily available for individuals in career or sport activities associated with a high incidence of eating disorders.

4.1 Residential facilities should be established to provide rehabilitative services for patients with eating disorders.

4.1.1 Each region should have access to a residential facility which is able to manage patients with eating disorders.

4.1.2 For regions in which adequate need has been identified, designated residential facilities which are specialized in the care of patients with eating disorders should be developed. Wherever possible these facilities should provide separate accommodation for child/adolescent patients and for adults with major mental illness.

4.1.3 Residential facilities for patients with eating disorders should be staffed by individuals with adequate skills and training in the management of such patients.

4.1.4 Residential facilities should be affiliated with a regional treatment centre and patient follow up should be coordinated with the centre's treatment team.

Prevention and Education Committee

Members: Sonia Chrysomilides, Paul Latimer, and Brian Morris
Chair: Brian Morris

Introduction: Effective prevention and treatment of eating disorders is dependent on the education of health professionals, educators and the lay public. It is hoped that in this way the number of people developing eating disorders can be reduced instead of escalating, as they presently are.

Risk Factors: The first step of the prevention and education committee was to do a literature search on the risk factors for eating disorders. An understanding of these factors enables primary prevention to be carried out. The National Eating Disorder Information Centre, as well as many authors, has established a number of risk variables.

Eating Disorder Risk Factors

1. Social Cultural
   - -females
   - -age 12 to 25
   - -career choices that stress being thin - dancers, models
   - -competitive athletes - skaters, gymnasts, wrestlers, over-involvement fitness centres
   - -women under strong pressure to achieve - medical students, law students
   - -occupations centering on diet - dietitians, cooks
   - -gender related issues - emphasis on thinness
2. Obesity
3. Repeated Dieting
4. Psychopathology
   - -depression
   - -borderline personality disorder
   - -low self-esteem
   - -difficulty identifying emotions
   - -perfectionistic tendencies
   - -body dissatisfaction
5. Physical and/or Sexual Abuse

6. Family Characteristics
   - -expectations of high achievement
   - -high levels of discord between parents
   - -high level of stress within the family - indirect and contradictory patterns of communication, especially regarding autonomy
   - -family history of illness - eating disorders, affective disorders, and possibly alcoholism
7. Chronic Medical Illness
   - -diabetes mellitus
   - -Crohn's disease
   - -cystic fibrosis

Prevention of Eating Disorders: Although more research is needed in this area, a number of things can be done to help prevent eating disorders:

1. Assisting teenagers and young adults develop healthy attitudes about the following:
   - -accepting the variation in healthy weights due to genetic make-up and body build (the Body Mass Index could be introduced)
   - -body image
   - -self-esteem
   - -coping skills (i.e., learning to communicate openly)
   - -advertising and societal pressures to be thin
   - -proper nutrition and exercise

2. Those teaching others about weight, body image, exercise and eating should:

   - -examine their own attitudes regarding food, weight and exercise;
   - -be able to accept the concept of healthy eating;
   - -avoid pushing adolescents to excel beyond their capabilities;
   - -provide adolescents with an appropriate degree of autonomy, choice and responsibility;
   - -be alert to crises in the lives of young people;
   - -be careful when encouraging young people to lose weight (i.e. express care for them regardless of weight);
   - -explore with adolescents their feelings of inadequacy and/or being unaccepted;
   - -be aware of the strong links between rigid dieting and the development of binge eating.

Current Status of Education and Prevention: The current university curriculum on the topic of eating disorders is both limited and fragmented. The status of training of health care professionals varies from centre to centre and leads to good training of some health professionals, poor training of others and no training of a significant number.

There is no province-wide organized program in prevention and early detection of eating disorders for teachers and counsellors in schools, to help teenagers and young adults. Some hospitals, mental health teams, private organizations and support groups offer prevention and education seminars and workshops, but not on an ongoing basis.

The Western Canadian Eating Disorder Education Society in 1988 did some education work in schools and with health professionals in a number of areas in the province but this program is not continuing at this time.

It is hoped that with adequate prevention and education regarding eating disorders, the numbers of eating disorders can be decreased and that early detection of eating disorders will result in more effective treatment. If health care workers, teachers, parents, etc., are aware of risk factors, as well as early signs and symptoms of eating disorders, secondary prevention will occur more readily, i.e., tracing and treating patients as early as possible so that adequate therapy for the patient and/or family can be given.

Recommendations

1.1 A provincial coordinating centre for community information and education on eating disorders should be established.

1.1.1 The coordinating centre should have an inventory of all the eating disorder programs currently operating in British Columbia.

1.1.2 The coordinating centre should maintain resource materials on prevention, education, and treatment.

1.2 The coordinating centre should distribute information materials to each regional treatment centre.

1.3 The coordinating centre should be an information resource for students and faculty in the health professions.

1.3.1 The coordinating centre should ensure that the curricula in dentistry, psychiatry, internal medicine, nursing, general practice, dietetics, and other health professions offer adequate training in the prevention, early detection, and treatment of eating disorders.

1.3.2 The coordinating centre should facilitate the organization of conferences on eating disorders.

2.1 Regional centres should act as a resource for other centres who wish to develop their own prevention and education materials.

2.2 Regional centres should be responsible for consulting with those responsible for the education of teachers and counsellors on how topics such as weight, eating habits, and eating disorders should be taught in schools and colleges.

2.3 Regional centres should be a resource for support groups, families, etc.

3.1 A special effort should be made to educate the staff and clients (of organizations involved with high risk populations, e.g., dance schools, modelling schools, fitness centres, competitive athletes, and occupations centering on diet) on issues related to weight, body image, diet, and exercise.

Public Impact Committee

Chair: Roger Tonkin

Introduction: There is a need for a government-sponsored public-impact program on eating disorders in B.C. The function of such a program should be to:

1. provide information that will counter prevailing myths about the causes and nature of eating disorders and thereby enhance public understanding of the problem;

2. desensationalize and destigmatize the problem and thereby foster public acceptance of sufferers and their families;

3. increase awareness of the need for and availability of treatment among:
   - -sufferers and their families
   - -non-health professionals, especially those that interact with high risk groups e.g., coaches, fitness instructors, school teachers
   - -health professionals in each community
   - -professional organizations and training institutions in the health disciplines

System of Information Services: There is a need to develop a system of information services for individuals or groups interested in, or concerned about, eating disorders. Such a system should be in place before any major public impact program is launched. The system should include:

1. a hot line or community resource information centre;

2. an easily accessible resource library of print and audio-visual material on eating disorders that is geared to the needs of sufferers and/or general public;

3. annotated bibliographies and professionally developed manuals for interested non-health professionals or their organizations;

4. continuing education courses for health professionals. These courses should be offered at two levels:
   i) for those with little or no prior direct experience with the diagnosis or management of eating disorders;
   ii) for those with more extensive experience with the management of patients with one or other type of eating disorder.

Non-Profit Society: There is a need for a provincial, non-profit society to be established along lines similar to other successful groups such as the Friends of Schizophrenics. The functions of such a body would be to:

1. advocate on behalf of the needs of those who suffer with any type of eating disorder;

2. give a public face to the problem of eating disorders in our society;

3. foster the development of a provincial network of self-help groups;

4. monitor the print and electronic media for images or messages that perpetuate distorted eating behaviour or idealize inappropriate body shapes;

5. support, where appropriate, the function of interest groups that operate within the eating disorder framework i.e., which may be simple issue or single type of disorder focused.

Recommendations

1.1 An eating disorder awareness and healthy weight program should be initiated and carefully monitored.

2.1 An eating disorder information service should be established.

2.1.1 The eating disorder information service should provide an inventory of existing educational materials (print, electronic media, etc).

2.1.2 The eating disorder information service should provide a regional public information or library system housed in existing local public access facilities, e.g., public health units or mental health centres.

2.1.3 The eating disorder information service should provide a regional professional resource centre housed in the regional eating disorder treatment centre.

2.1.4 The eating disorder information service should provide a provincial educational resource development centre housed in a university based or continuing education facility.

2.1.5 The eating disorder information service should provide a provincial network of hotlines.

3.1 Contracts should be made with ANAD and/or the McCreary Centre Society in order to develop a provincial network of self-help groups.

3.1.1 These contracts should lead to the establishment of a provincial non-profit society that will advocate on behalf of sufferers and their families.

4.1 A committee to examine program content within the various government agencies should be established.

4.1.1 This committee should determine opportunities for promoting healthier eating behaviours and increasing awareness of eating disorders.

4.1.2 This committee should include representation from Health, Education, Social Services and Housing, Corrections, Labour, and Recreation.

5.1 The private media sector (print and electronic) should be encouraged to develop positively oriented public service information spots on eating disorders.

5.2 The Open Learning Agency (Open College, Open University, and Knowledge Network) should be encouraged to become involved in development of a curriculum related to eating disorders (for lay and professional learners).

Self-Help Committee

Members: Lorraine Hathaway, Linda Lauritzen, Bev McLagan, and Derryck Smith
Chair: Derryck Smith

Introduction: Self-help groups are becoming increasingly recognized as necessary components of any health care system. By their very nature, self-help groups tend to focus on individuals with a particular disorder, but also on helping their friends, family, and the extended community cope with the effects of illness. Most self-help groups focus on a particular illness and may provide a broad spectrum of services, ranging from treatment to education.

Many self-help groups focus, to a great extent, on treatment of individuals. The most famous of these groups is Alcoholics Anonymous. The committee believes that ideal self-help groups for patients suffering from eating disorders would have the following functions:

1. provide emotional support for members and provide assistance in the broadest sense;
2. provide a forum in which families and patients can express feelings;
3. gather, co-ordinate and distribute information on eating disorders;
4. provide education for members, their families, their communities and professionals in their communities;
5. serve an advocacy role on behalf of providing necessary services;
6. promote increased awareness of the broad spectrum of eating disorders;
7. promote research in the area of eating disorders.

It should be noted that treatment is not considered by the committee to be a function of self-help groups. Our review of the literature strongly suggests that:

1. self-help groups are most successful when they have a national or provincial umbrella organization which provides assistance and organizing skills to local branches
2. eating disorder self-help groups must have affiliation with treating professionals and be led by trained facilitators

In the United States there are five or six national organizations dedicated to helping persons with eating disorders. In Canada, there is only one such group, the National Association of Anorexia Nervosa and Associated Disorders (ANAD). This organization, with headquarters in Vancouver, is an incorporated group embodying many of the principles which the committee recommends. It has been functioning in British Columbia since 1982. It has close ties with a similarly named organization in the United States, but has a uniquely Canadian perspective.

Recommendations

1.1 Self-help groups are a necessary component of the treatment and support network for eating-disorder sufferers, their families, and their communities.

1.1.1 There should be a provincial organization whose mandate it is to facilitate, coordinate and support the establishment of local self-help groups in each of the five regions of the Province.

1.2 Each treatment centre should have a self-help group attached to it, although in larger metropolitan areas one self-help group might be associated with more than one treatment program.

2.1 The National Association of Anorexia Nervosa and Associated Disorders (ANAD) should be recognized as the umbrella organization for local self-help groups in British Columbia.

3.1 Funds should be provided to ANAD to cover the expenses for office space, secretarial support, educational materials, and a professional facilitator.

3.1.1 The facilitator must have sufficient resources to travel to local communities to encourage and support the establishment of local community organizations.

3.1.2 The facilitator should be capable of training other facilitators to lead local level self-help groups.

3.1.3 The facilitator should ensure that the self-help groups maintain close ties with designated treatment centres and all professionals in the community who are treating persons with eating disorders.

4.1 There should be separate self-help groups for children and adolescents and adults. Inclusion in one of these groups should be based on the needs of the individual, rather than on a fixed age.

4.2 Self-help groups should provide support services for the individuals and but also for their families. This may be done through either integrated or separate groups, for individuals and their families.

5.1 Individuals with eating disorders, along with their families, should be encouraged by treatment professionals to join their local self-help group.

6.1 Although self-help groups should remain independent of the administrative and program structure of the treatment facility, there should be a close link between treatment resources and self-help groups.

6.2 Treatment facilities should facilitate self-help groups by providing space and encouraging treatment professionals to become involved.

6.3 Facilitators, educators, and speakers should be provided for the self-help groups by the treatment facilities.

7.1 The long-term goal of the umbrella organization (ANAD) should be to build a financially self-sufficient organization, capable of sustaining its own functions as well as providing leadership in the areas of advocacy and research.

Epidemiology Committee

Members: Richard Freeman and Roger Tonkin
Chair: Richard Freeman

The function of this committee was to review the data generated by the EDTF research staff, to prepare some general statements on prevalence based on the data, to offer an opinion on recent trends, and to make recommendations for future research.

The data produced for the EDTF included several widely differing sets of prevalence estimates. The committee had two sets of data derived from physicians and/or hospitals. These provided fairly consistent annual eating disorder caseload estimates of between 1,000 and 1,350 cases. It is presumed that these estimates represent the most severe cases currently known to physicians and therefore are minimal-point prevalence figures. It is the committee's opinion that these data represent a gross underidentification of genuine illness. To illustrate the point we calculated the number of cases of anorexia nervosa there should be amongst B.C. schoolgirls (using Crisp's prevalence estimate of 1 per 100 schoolgirls). There should be about 1,000 to 1,200 adolescent girls in B.C. with anorexia nervosa whereas the known caseload is only 300 to 400. It would appear that B.C. physicians fail to recognize all but the more extreme forms of this disorder.

Mall surveys, while epidemiologically flawed, provided data which more closely approximated what we know about eating disorders. Self-selection biases in mall-type surveys may act to inflate the number of positive responses. However, the respondents had to meet strict DSM IIIR diagnostic criteria, and those with merely bad eating habits were assigned to the normal group. In addition, the distribution of diagnoses among the different types of eating disorders and the distribution of the caseload about the province fits with the committee's clinical impression of the present situation in B.C. A point prevalence of 9% for anorexia nervosa and/or bulimia nervosa and a lifetime prevalence of 4% seem to be safely conservative estimates of the frequency of the disorder in young women in our province. The 7% prevalence for obesity also seemed reasonable and conservative.

There were a number of epidemiologic questions that the data did not address. For example, we have no information about prevalence in ethnic populations such as our Native Indians. Nor do we have adequate information on a number of special populations which are at high risk because of dual diagnoses (medical or psychiatric) or by virtue of career or other risk factors.

Despite these reservations the committee believes that the available data support the following statements:

1. The incidence and prevalence of eating disorders in B.C. approximates that reported in the literature.

2. There has been a trend towards an increasing number of cases of anorexia nervosa and anorexia nervosa/bulimia nervosa in recent years in B.C.

3. About 1,500 men, women, children, and adolescents in B.C. are known to suffer from the most severe forms of one or other type of eating disorder. The age at onset varies from childhood into the senior years, but the majority of cases are in the age group 20 to 29 years. Women are more affected than men. Most suffer with their disorder for a number of years.

4. Eating disorders are found in all regions of the province but are significantly underdiagnosed.

5. The treatment of eating disorders consumes a significant number of acute care hospital bed days in B.C.

6. The existing resources for treatment of eating disorders in B.C. do not meet the perceived need for referral resources.

7. There is very little ongoing, solidly funded research on eating disorders being undertaken in B.C. There is a lack of reliable epidemiologic, follow-up or outcome, or program evaluation data on the population of eating-disordered individuals in our province.

8. Few peer review journals in the field contain publications or references to B.C. generated studies.

Recommendations

The Epidemiology committee believes that demographically based resource planning and priority setting, evaluation of innovative programs, and monitoring of provincial outcome statistics are important components of a comprehensive approach to the problem of eating disorders in B.C.

1.1 That the Ministry of Health establish a central registry for cases of each type of eating disorder.

1.1.1 The registry should be modelled along the lines of the highly successful Health Surveillance Registry and should include features such as multiple sources of ascertainment, physician supervision of diagnostic classification and inclusion criteria, a capacity for follow-up contact to assess current status, and protection of confidentiality.

2.1 Each provincial centre should be provided with sufficient financial support to provide for the establishment of a core research program in the eating disorder field.

2.1.1 Funding should be a shared responsibility between provincial [BCHCRF] and hospital foundations and should provide release time for interested clinicians who wish to engage in clinically oriented research; research assistant and pre-doctoral or post-doctoral student support, statistical and clinical epidemiology services, and clerical staff time. Support should be for a minimum of two years and be extendable for a third year if there is demonstrable progress.

3.1 A clinical epidemiology unit for the study of eating disorders in B.C. should be established at one of the provincial centres. The unit should undertake ongoing studies of incidence and prevalence of each type of eating disorder, monitor trends and develop early warning indices, provide a consultative service to regional or provincial centres, provide a consultative service to the proposed central registry, and assist any bona fide investigator with the design or analysis of studies based on eating disorders in B.C.

3.1.1 The clinical epidemiology unit should be funded from Lottery sources for a term of five years, and funding should be renewable for a second term if satisfactory progress is demonstrated.

4.1 **Two clinical nutrition research units should be established, one at an adult-oriented provincial treatment centre and the other at the child/adolescent-oriented provincial treatment centre.**

4.1.1 The clinical nutrition research units should be funded from research development funds drawn from private and public sector granting agencies.

5.1 A collaborative study of chronic anorexia nervosa be undertaken. The study would cover its prevalence, complications and co-morbidity, outcome and extent of disability. Funding for this study should be contracted with one of the existing university-based adult treatment centres.

6.1 A longitudinal study of the "natural" history of each type of eating disorder be undertaken. Such a study would require a sustained commitment over a number of years and should be a collaborative project under the auspices of the proposed clinical epidemiology unit.

APPENDIX C

Camp Elsewhere Evaluation

Introduction

Camp Elsewhere

A pilot camp project for adolescents with weight problems due to anorexia nervosa was held during the summer of 1988. The evaluation of this camp was sufficiently positive to encourage the Society to move towards the establishment of an expanded, more permanently based prorgam for 1989. A fund raising initiative was launched in order to underwrite the needed capital construction and equipment acquisition. A total of $36,000 was raised and under the volunteer project management of Board member Carrol Lundell the facility was up and running by July 8, 1989. A property lease and services agreement was negotiated between the Society and the owner/manager of Surf Lodge Ltd.

Camp Objectives

The Camp Elsewhere program was designed to provide an alternative to hospitalization and traditional treatment approaches for eating disordered adolescents including those in chronic low weight (anorexia nervosa) and morbidly obese states. This alternative treatment approach hoped to better serve the developmental tasks of adolescence than is possible within the confines of a hospital or outpatient clinic setting. As well, the program served to provide relief from parenting for the families of the patients involved.

The more specific objectives which the camp program attempted to meet included:

- promoting physical, emotional and social wellness in the campers;
- fostering independence, social skills, and self-reliance;
- enabling campers to experience normal adolescent eating patterns;
- decreasing the level of anxiety experienced while eating;
- fostering weight normalization;
- engendering adaptive attitudes about body weight, food, and eating;
- improving family functioning.

The present evaluation report is directed toward assessing the degree to which the camp was able to meet these specific goals. The evaluation is based upon the analysis of a number of physical, observational and self-report measures taken before, during, and after the camp, which were chosen specifically to address the objectives outlined above.

Program Description

Physical Setting

The camp was physically located near the northeast shore of Gabriola Island, and included: a wood-frame cottage which served as both a crafts-cabin and lunch-room, a separate cabin for the Camp Supervisor, and six large tents set up on wooden platforms for the campers. The space occupied by the cabins, tents, and surrounding cleared grounds was the property of the Surf Lodge; a privately-owned hotel.

Staff

The staff included both full-time and part-time members. Those who remained at the camp full-time included: the camp supervisor, who was responsible for the administration and supervision of all camp activities including leisure, meal preparation and consumption, physical assessment of patients, and psychological and dietary counselling; camp counsellors who assisted the supervisor, lived with the campers and supervised daily functioning, as well as providing support, direction and encouragement to the campers; camp counsellors-in-training who were recovered eating disordered patients who had previously attended the camp program, and who assisted the counsellors.

The part-time staff included a local physician who was consulted periodically, the research assistant who visited the camp to collect data, a dietitian who had arranged the meal plan for the campers, and, of course, the project coordinator who was responsible for the higher level administrative and program-related decisions and who visited the camp regularly to monitor its progress. As well as these personnel, the staff of the Surf Lodge were involved in provision of recreational assistance, as well as providing daily supper meals to the campers.

Camp Program

The program lasted six weeks for most of the campers; three of the anorexic campers arrived after the second week and were in the program for the next four weeks. The main therapeutic element of the program was the milieu of a normal, fun summer camp. The usual camp activities such as basketball, badminton, baseball, arts and crafts, outdoor cooking and campfires, hikes, and swimming were provided in as relaxed and recreational atmosphere as possible.

As well as this emotionally nurturing environment, the camp provided carefully monitored dietary management designed to increase body weight of the anorexics, and decrease that of the overweight group. The actual foods chosen reflected as closely as possible those consumed by normal adolescents, and were presented in normal portions to encourage the campers to develop healthy, moderate eating patterns. Meals were served in a relaxed, congenial, and social atmosphere and anxieties regarding eating were addressed immediately and directly.

Social interaction was made necessary and encouraged by the camp, and normal, adolescent social interaction and problem-solving was a cental component of the therapeutic milieu. Campers were also encouraged to be self-reliant and responsible, and were given challenges to meet which allowed for the experience of personal mastery, as well as autonomy, and self-reliance.

In order to determine the extent to which the camp achieved its stated objectives in terms of being of therapeutic benefit for the campers physically, psychologically, and socially, a battery of physical and psychometric measures were taken both prior to and following the camp which specifically addressed campers' status within each of these areas of development.

Method

Subjects

The campers included six patients who had been diagnosed as suffering from anorexia nervosa, and eight patients with a diagnosis of morbid obesity. The sex, age, height, weight, and body mass index (BMI) for each of these campers and the group means for these variables are presented in Table 1.

The six female anorexic patients were of the restricting type; no obese-bulimic or bulimic-anorexic patients attended the camp.

Instruments

Physical

Although a number of physical measures were taken during the camp, the one most relevent to the program objective of weight normalization was BMI, and so, this was used as the sole physical outcome measure. Height and weight were measured both prior to and just after the camp program by the camp supervisor using a standard physicians' scale.

Eating Behavior

Eating behavior was assessed by use of an observational rating scale which was completed by both the camper's assigned camp counsellor, and by the camper's parent(s). Observers rated the camper's behavior related to mealtimes with regard to the following characteristics: meal times (usually late to usually early); meal pace (eats very quickly to eats very slowly); meal quantities (eats very little to eats far too much); meal mood (very distressed to jubilant mood); meal compliance (very disruptive to very cooperative); social activity during meals (hostile to very social). Each of these characteristics was rated on a Likert-type scale ranging from -2 to +2 with each point descriptively labelled.

The first three items of this scale were scored in opposite directions for anorexic and obese campers, with higher scores representing a move toward normalization of meal behavior. The last three items were scored the same for both groups, with higher mood, compliance, and sociability scores taken as indicative of improvement. An overall meal behavior score was tabulated for each rating by counsellors and parents both before and after the camp.

Experience of Food and Hunger

The subjective response of campers to ingestion of food and their experience of hunger both before and after a meal were assessed by having campers complete a "Meal Mood Questionnaire" (MMQ). The MMQ asked campers to indicate how they felt both during and following a meal on a number of subjective states: frustrated, embarassed, comfortable, angry, nervous, and hungry. Only the last two items were scored; the remainder were included in order to mitigate the demand characteristics of the measure. Ratings were made on a Likert scale from 1 to 5, each point labelled with a descriptor from "Not at all," to "Extremely."

Psychological Factors Related to Eating and Body Weight

Two different measures were used in the anorexic and obese groups to assess attitudes, values, and needs which have been identified as clinically important indexes in the relevent research literatures.

The Three-Factor Eating Questionnaire (3-FEQ; Stunkard & Messick, 1984; 1985) was administered to the overweight campers before and after the camp. It was designed to assess dietary restraint, disinhibition of eating (ie. binge-eating), and subjective hunger in overweight individuals. It is a 51-item questionnaire with two-sections: Part I contains 36 self-referent items related to dietary behavior, answered True or False. Twelve of these items relate to scale 1, Restraint, 12 to scale 2, Disinhibition, and 12 to scale 3, Hunger. Part II of the questionnaire contains 15 questions regarding eating behavior rated according to Likert scales. Eight of these correspond to scale 1, 4 items to scale 2, and 3 items to scale 3. The alpha coefficients for the three scales are .93 for Restraint, .91 for Disinhibition, and .85 for Hunger.

The anorexic campers were assessed pre- and post-camp by the Eating Disorders Inventory (EDI; Garner, Olmstead & Polivy, 1983). This inventory is a 64-item measure which produces 8 scale scores. The scales were designed to assess psychological and behavioral traits common in eating disorders and include: 1) Drive for thinness, 2) Bulimia, 3) Body dissatisfaction, 4) Ineffectiveness, 5) Perfectionism, 6) Interpersonal distrust, 7) Interoceptive awareness, and 8) Maturity fears. This measure has been used extensively in research on eating disorders, and has well-established internal consistency, and external, criterion validity.

For the purposes of this outcome evaluation, only scales 1, 3, and 8 were analysed, providing information about potential change in the drive to be thin, dissatisfaction with physical appearance, and fears of psychological and physical maturation.

Social Behavior

Campers' level of social interaction, apparent willingness to engage in social activity, and degree of social skill were assessed before and after the camp by both parents and camp counsellors using an observational rating scale. Observers rated the camper's on a Likert scale from 1 to 5 for eight social-behavior tendencies: 1) initiates conversations with others, 2) approaches and interacts with others, 3) engages in normal daily activities with others, 4) responds positively to being approached by others, 5) others respond positively to this person's approaches, 6) engages in normal, socially-appropriate conversation, 7) is helpful to and show concerns for others, and 8) responds positively to group activities.

Self-Concept and Autonomy

The campers' view of themselves as independent, autonomous individuals, and their degree of self-confidence was assessed by use of the Self-Efficacy Scale (SES; Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs, & Rogers, 1982). This scale focuses on Bandura's construct of self-efficacy (Bandura, 1982) which asserts that expectations of success in challenging situations are central to adaptive, mature functioning, both socially and generally. The SES is a 23 item scale with two subscales: general self-efficacy (17 items), and social self-efficacy (6 items). The scale has been used extensively in clinical research, and has well-established construct, and criterion validity. The SES was filled out by campers both before and after the camp.

Family Functioning

Family functioning was assessed by having both parent(s) and campers complete the Family Environment Scale (FES; Moos & Moos, 1981) before and after the camp. The FES was chosen from a number of scales designed to measure family functioning for two reasons: it is relatively short, and yet provides a range of useful information, and it has been used widely as an assessment and research tool with eating disordered populations. The FES has been thoroughly standardized and has established norms for both normal and dysfunctional families.

The FES is composed of 10 subscales which each contain 6 true or false items. Of these subscales, five have been identified as being of particular relevence to the functioning of families with eating disordered members: Cohesion, Expressiveness, Conflict, Organization, and Control (Kog, Vandereyken & Vertonnen, 1985). In the present report, only these five scales were analysed for pre- and post-camp differences.

Design and Data Analysis

The outcome evaluation was based on a pre-test post-test design with two treatment groups. Initially, control groups of anorexic and obese patients who did not attend the camp were to be used, however, response rate was not adequate to allow for useful statistical comparisons.

In total there were 18 scores generated by the nine outcome measures, yielding 18 dependent measures. Specific a priori predictions were made about each of these with regard to pre-test post-test comparisons. These comparisons were carried out via a repeated measures ANOVA for each of the 18 dependent variables (BMDP Program P2V). For comparisons in which improvement was expected to be uniform across patient groups, the groups were analysed together, however, for many variables the comparisons were made within treatment conditions only. The small sample sizes, and large number of dependent measures necessitated a Bon Ferroni correction be applied to analyses to control for spurious differences.

Results

With regard to the results in general, the small sample size and necessity of conservative alpha values for statistical significance reduce the number of statistically significant differences between pre- and post-camp measures. Given the limited data that is available, it may be useful to comment on data trends, rather than on statistically significant findings. The results should be considered clinically relevent, and in that context provide useful information, without necessarily being useful in terms of extrapolation to population values.

Physical

Changes in body weight (BMI) for the obese and anorexic groups are represented in Figure 1. Although the changes are not statistically significant, $F < 1$, in both groups the weight changes are in the right direction. In the anorexic group, four campers gained weight, and only one lost a small amount (.5 kg), with the mean BMI going up from 16.8 to 17.9; one anorexic camper did not complete the program. Each of the obese campers lost weight, with the mean BMI dropping from 35.0 to 30.6.

Eating Behavior

For the overweight group, the mean rating of meal behavior by parents before the camp was 5.25; following camp it was 6.33 -- an improvement of 20.6%. The pre-camp rating of meal behavior by camp counselors was 3.30, and following camp was 4.31, going up 30.6%. For the anorexic group, the parent rating of meal behavior improved 96.9% (from 3.3 to 6.5), and the counselor rating went up 100% (1.5 to 3.0). These differences are not, however, statistically significant ($p > .10$).

Experience of Food and Hunger

For neither group was there a significant difference in the rating of food as anxiety provoking ($F < 1$). In the obese group, ratings of hunger dropped from a mean of 4.75 to 4.33, while in the anorexic group it remained steady at 2.00.

Psychological Factors Related to Eating and Body Weight

Mean scores on the 3-FEQ scales of Restraint, Disinhibition, and Hunger before and after camp for the obese campers are presented in Table 2. Mean scores for the EDI subscales of Drive for Thinness, Dissatisfaction with Physical Appearance, and Maturity Fears for anorexic campers, before and after the program, are presented in Table 3. Although there is some improvement on most of the scales, none of these differences reached statistical significance ($p > .10$).

Social Behavior

For the anorexic group, parent and counselor ratings of social behaviors before and after the camp are presented in Table 4. Table 5 contains the corresponding ratings for the obese group. In both groups, there are gains in the mean social ratings, however, once again, these are not statistically significant findings in either analysis within groups, or with both groups combined ($p > .10$).

Self-Efficacy

The results for the SES for all subjects, and for each group separately, before and after the camp, are reported in Table 6. Once again, although there were consistent gains on this measure, the differences were not statistically significant ($p > .10$).

Family Functioning

The mean scores for the obese and anorexic groups on the FES subscales of Cohesion, Expressiveness, Conflict, Organization and Control before and after camp are presented in Table 7. None of the changes from pre- to post-camp FES subscale score reached statistical significance ($p > .5$).

Conclusions

Objective Results

It would be misleading to report only that there were differences between the scores on our outcome measures before and after the camp without pointing out that these differences could have occurred by chance at least one in ten times. Nonetheless, it would be equally misleading to conclude that there was no evidence of therapeutic benefit from the camp program. The fact that the differences in scores, such as in

BMI values, did not reach statistically significant levels reflects both the fact that the research was conducted on very small sample sizes, and that the differences in scores before and after the program were not of a great magnitude. The fact that the great majority of our 18 outcome measures showed change in the expected direction greatly enhances the overall implications of the data. The many small changes in the direction of therapeutic benefit suggests that there was a small, but broad-based objective benefit of the camp for eating disordered patients.

The therapeutic goals of the program were quite nonspecific, and based upon a milieu-type treatment modality. It might have been predicted that the impact of the camp would be a quite general one. There was no area of concentrated therapeutic effort, and no one area of therapeutic gain. Overall, however, the many small changes observed in both the anorexic and obese campers ranging from body weight to social behavior, to family functioning, to self-concept, suggests that the camp program is in fact a highly valuable tool of therapeutic change, and a viable alternative to hospitalization.

Subjective Conclusions

A great deal about the summer camp program is virtually impossible to convey through empirical means; the experiential component which involves the cameraderie and challenge of peers; the exhiliration of mastery and self-sufficiency; the thrill of living away from home, away from the city, and outdoors. All of these might certainly have a lasting impact on the adolescent's developing sense of autonomy, and identity. Perhaps the most important evaluation measure of the camp was the experience of visiting the camp itself. Data alone can not convey the phenomenology of kids in a summer camp having fun. The camp makes clear to the campers and staff alike that these are after all teenagers first and foremost, and the fact that they are also patients becomes almost trivial compared with that.

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Table 1

Sex, age, height, weight and body mass index (BMI) for anorexic and obese campers.

Anorexic		Age (yrs)	Height (m)	Weight (kg)	BMI[a]
	Sex				
1 -	f	16	1.70	49.1	16.95
2 -	f	14	1.52	31.4	13.56
3 -	f	17	1.72	55.5	18.76
4 -	f	15	1.66	44.1	16.04
5 -	f	15	1.69	52.3	18.38
6 -	f	15	1.55	40.9	17.09
$\bar{X}$ =		15.3	1.64	45.6	16.80
SD =		1.0	.08	8.7	1.87
Obese					
	Sex				
1 -	f	13	1.66	83.6	30.23
2 -	m	13	1.72	95.2	32.18
3 -	m	12	1.63	99.3	37.19
4 -	f	14	1.71	99.8	34.21
5 -	f	14	1.63	103.4	38.73
6 -	m	13	1.56	103.4	42.65
7 -	f	15	1.74	106.4	35.02
8 -	f	13	1.63	78.6	29.51
$\bar{X}$ =		13.4	1.66	96.2	34.97
SD =		.9	.06	10.0	4.45

[a] BMI = Weight (kg) / Height ^{2} (m^2)

Table 2

Mean 3-FEQ scores for obese campers before and after camp.

Scale:	Restraint	Disinhibition	Hunger
Pre-camp			
$\bar{X}$ =	11.0	10.8	8.0
SD =	6.1	4.7	3.9
Post-camp			
$\bar{X}$ =	9.7	6.3	5.3
SD =	5.9	4.9	7.5

Table 3

Mean EDI subscale scores 1, 3, and 8 for anorexic campers before and after camp.

Scale:	1. Drive for Thinness	3. Dissat. with Appearance	8. Maturity Fears
Pre-camp			
$\bar{X}$ =	14.0	18.7	6.0
SD =	7.8	6.8	7.2
Post-camp			
$\bar{X}$ =	14.0	25.0	2.0
SD =	2.8	2.8	1.4

Table 4

Mean counselor and parent ratings of social behavior in anorexic campers before and after camp.

		Pre-camp	Post-camp
Counselor	$\bar{X}$ =	31.0	32.0
	SD =	5.0	8.5
Parent	$\bar{X}$ =	30.3	33.5
	SD =	9.9	6.4

Table 5

Mean counselor and parent ratings of social behavior in obese campers before and after camp.

		Pre-camp	Post-camp
Counselor	$\bar{X}$ =	26.3	29.7
	SD =	4.1	5.9
Parent	$\bar{X}$ =	34.0	34.0
	SD =	3.4	5.6

Table 6

Mean Self-Efficacy Score for obese and anorexic groups, and for both groups combined, before and after camp.

		Pre-camp	Post-camp
Obese	$\bar{X}$ =	10.1	11.8
	SD =	5.4	4.8
Anorexic	$\bar{X}$ =	13.3	13.8
	SD =	2.9	3.8
Combined	$\bar{X}$ =	11.5	12.5
	SD =	4.7	4.4

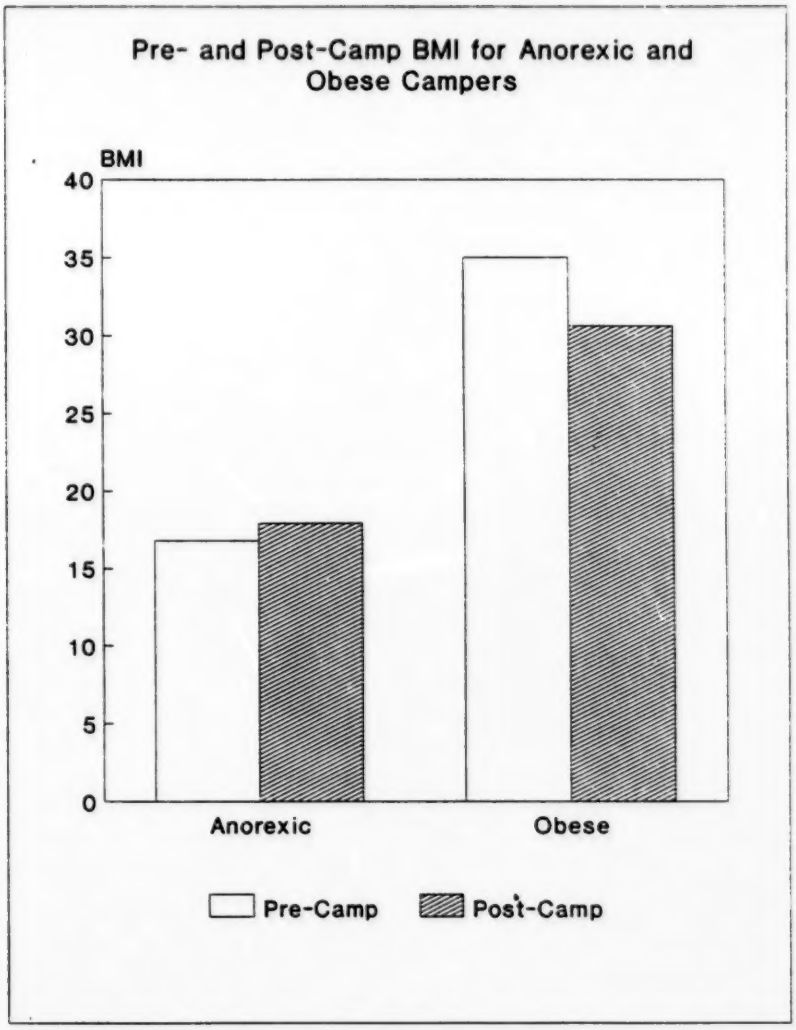
Table 7

Family Environment Scale scores for obese and anorexic campers before and after camp.

Obese	Pre-camp		Post-camp	
Subscale	$\bar{X}$	SD	$\bar{X}$	SD
Cohesion	3.86	.97	4.40	.79
Expressiveness	4.77	.63	4.34	.25
Conflict	5.64	1.05	5.90	1.10
Organization	4.37	.95	3.74	1.00
Control	4.91	.52	3.78	.61

Anorexic	Pre-camp		Post-camp	
Subscale	$\bar{X}$	SD	$\bar{X}$	SD
Cohesion	4.07	1.77	4.55	2.06
Expressiveness	4.62	.77	5.13	.76
Conflict	5.15	1.37	5.05	1.59
Organization	4.52	1.09	4.03	.77
Control	5.25	1.18	4.63	1.09

Figure 1.


Pre- and Post-Camp BMI for Anorexic and Obese Campers
BMI
40
35
30
25
20
15
10
5
0
Anorexic
Obese
Pre-Camp
Post-Camp

Appendix D

Residential Treatment Facility

The Facility

The facility, whether operated on a non-profit or private-for-profit basis, will require housing as a specialized residential care facility under the Community Care Facility Act and the Associated Adult Care Regulations. Location of the facility will be be subject to municipal by-laws. If the facility received funding from the Community Residential Program of Mental Health Services (M.H.S.), Standards established by M.H.S. will apply as well.

Funding

A variety of ownership and funding arrangements may be considered in each region.

Size

An appropriate facility size for patients with eating disordrs is four (4) to six (6) beds depending on regional need and economic viability. Facilities larger than six beds are viewed as less beneficial and possibly counterproductive.

Residents

The residents will be women aged 19 and older with eating disorders, many of whom will be referred from a hospital treatment program for ongoing supervision, particularly in the area of nutrition and food intake, and for emotional support and life skills training.

Where residential care is required for children and adolescents, separate residences need to be established to reflect the different developmental needs of this age group.

The Program

The focus of the residential program will be on developing and supporting a healthy life style in all areas of living. It will be tailored to the individual and will build on the individual's personal and social strengths. Residence-based programs will be limited, for the most part, to those activities which are best provided in the residential context and prepare the individual for responsible, independent living in the communtiy. Involvement in "normal", regular community activities such as education, work and recreation will be part of the day-time structure.

Some group therapy activities and indivdual therapy sessions provided by visiting clinical staff may take place in the residence. However, continuing clinical care will, wherever possible, be provided in the clinical rather than the residential context.

Staffing

The Community Care Facility Act requires staffing on a 24-hour basis. One qualified staff member must be approved in accordance with the Act. At least one (1) staff member must be on duty at all times.

The staffing pattern in each residence will be determined by the number of residents (beds), the specifics of the program, the auspices (whether private or non-profit) and the number and role of visiting staff.

Evaluation

Each residence will be evaluated on criteria to be established by the Provincial Coordinating Body.

Appendix E

Briefs Received

Mary Jane McLachlan, R. Psych
University of Victoria Counselling Services

Karen Neilson, RN

*Nursing Report
Carolyn Hammond, RN, BSN
Karen Ryall, RN, BSN

*Nutrition Services Department, Victoria General Hospital
J. Arnason, MD
Eileen Carolan, RDN
Helen Dubas, RDN
Ian Gillespie, MD
Heather Hermansen, OT
J. Kirkpatrick, MD
Linda Kristien, OT
Dianne Lawson, SW
Elizabeth McLelen, RDN
Joyce Schnetzler, RDN
Lucie Wood, RN

*Provincial Community Nutritionists

Leslie Solyom, MD
Anorexia/Bulimia Clinic

* Reports enclosed

NURSING REPORT

Submitted to the B.C. Task Force on Eating Disorders

by

Carolyn Hammond, R.N., B.S.N.
Nurse Clinician Youth Clinic, B.C. Children's Hospital

Karen Ryall, R.N., B.S.N.
Head Nurse Adolescent Unit, B.C. Children's Hospital

April 1989

THE CURRENT SITUATION

Adolescents with eating disorders are treated by specialists in the field at B.C.C.H. on the Adolescent Unit, a 20 bed medical/surgical ward. These patients are seen following discharge in the Youth Clinic, a BCCH outpatient clinic housed in a trailer on the Sunny Hill Hospital site.

The types of eating disorders seen in the Youth Clinic are as follows:

Anorexia Nervosa (restrictor) - restricts their intake so weight maintenance or growth cannot occur, exercise excessively to reduce weight, have an intense fear of fat and gaining weight. These individuals often need institutional care to recover.

Anorexia Nervosa with Bulimic Traits (restricting bulimic) - as well as features of anorexia nervosa, these individuals use purging behaviour such as vomiting after eating, laxatives, diuretics, ipecac and other medications to reduce weight. These individuals occasionally need institutional care if they drop their weight rapidly, become severerly depressed, or experience difficulties from medication abuse.

Bulimics (bingers) - have episodes of out-of-control eating (binges) where large volumes may be consumed at one time or constant "grazing" on food with little purging behaviour. These individuals may need institutional care to interrupt constant binge behaviour or if severely depressed.

Morbid Obesity - these adolescents' weight creeps up over many years with a more rapid increase at puberty that may result in medical complications. These individuals may need institutional care for weight reduction and lifestyle skill building.

Staffing At BCCH

The staff in the Youth Clinic all work part-time - the secretary (0.5 FTE), the nurse clinician (0.5 FTE), the physician (0.5 FTE), and the dietician, social worker, psychologist and occupational therapist (0.1 - 0.2 FTE). Apart from the secretary and the nurse clinician, the other members have full-time positions at BCCH and are able to provide continuity of care to the Eating Disorder patients who need admission to the hospital from the outpatient clinic.

The adolescent unit seems to be able to manage three patients at any one time, although very occasionally there have been four or five. The nurses are experienced in managing patients with anorexia nervosa and handling difficult adolescent behaviour if it arises. If acting out behaviour continues and disturbs ward functioning the patients are sent home or to a psychiatric facility. This usually means an adult psychiatric ward at St. Paul's or University Hospital, UBC Site. The Maples Psychiatric Residential Treatment Center has been considered for some of the more chronic, resistent cases.

Nursing Care at BCCH

The patients with Anorexia Nervosa currently stay an average of 8 weeks in hospital to regain their nutrition. This has been as long as 20 weeks. Readmissions for weight loss are not uncommon, and consecutive weekends (when bed utilization is usually lower) have been used to try to stop weight loss following the initial longer stay in hospital.

The patients often require a low stimulus, closely monitored environment when they first enter hospital, which means a private room near the nursing station. Occasionally, video cameras are hooked up to monitor the patient's activity, meals, nasogastric feeds, rest periods etc. Also, at times, one-to-one nursing is required for the severely depressed patient.

A primary nurse is assigned each patient to make sure the treatment plan is being followed and to develop a rapport with the adolescent. Due to the manipulative nature of the patients all the regular ward staff take turns caring for them to prevent burnout. Float staff are not assigned these patients.

The Youth Clinic nurse clinician has no time allotted for working with the in-hospital patients other than an occasional skinfold measurement. She sees new patients for assessment, follows a caseload of outpatients as the primary worker, co-leads a group for the parents of these patients, develops patient education material, and completes some physical assessment measures on all eating disordered patients.

THE IDEAL SITUATION

The Hospital Stay

Their is no doubt that the severely malnourished adolescent with an eating disorder is at risk for medical complications of starvation and the refeeding process. The initial few weeks are best spent in a general hospital ward, unless there is some reason to warrant psychiatric care.

The Residential Treatment Center

Once the patient has stabilized and progress is being made, transfer to a residential setting would be preferable as that situation more closely assimilates a home setting where regular eating patterns could be modelled, confidence building in a group of peers could occur, and integration back into the family of origin and the community could be facilitated more naturally and more rapidly.

The facility would ideally include the following physical structure in an urban, semi-rural or rural area in a house or single to two storey building:

1. Large dining area for group meals.
2. Kitchen with pantry including freezer.
3. Bedrooms for one and two patients.
4. Parent sleeping room.
5. Time out room with video setup.
6. Common multipurpose room for crafts, activities, school, group meetings.
7. Library, study room.
8. Exercise room.
9. T.V., computer room.
10. Office and counselling space.
11. Toilets separate from bathing facilities.
12. Locked room with scale and treatment equipment.
13. Glassed in porch/greenhouse area.
14. Outdoor space for garden and small anial husbandry.

Staffing at the Residential Center

Twenty four hour coverage would be necessary with a combination of nursing, medical, and child care persons. Day persons would also include a secretary/bookkeeper, kitchen cook and helper, housekeeper, groundskeeper/driver, night security person, family therapist, school teacher, recreationist, dietician, psychologist, and psychiatrist.

Patients at the Residential Center

This center could take many different levels of care. They would include:

1. Long term renourishment and therapy.
2. Readmissions for weight loss following initial admission.
3. Weekend admissions for weight stabilization.
4. Daycare transition phase - where patients would eat meals at the center and sleep at home, gradually taking more meals at home. Parents could stay at the center to work out meal preparation, activity levels and family interaction patterns during the weight maintenance time. School could also be reintroduced in phases with home bound teachers, then half days and then full days.
5. Short stay crisis intervention for depressed eating disordered patients.

Brief to the Provincial Task Force on Eating Disorders
From: Provincial Community Nutritionists

This brief from the Nutritionists to the Provincial Task Force on Eating Disorders will focus on prevention. Discussion among a number of nutritionists involved with the issue produced a strong message: the prevention of eating disorders should focus on the roots of the problem in individuals and society. Therefore the main messages should be directed at:

- increasing self-esteem and a positive body image among children and adolescents
- accepting that a variety of body shapes and sizes is normal and desirable
- defining a healthy range of weights versus an arbitrary "ideal" weight
- analyzing and refuting the unrealistic social and media pressures to be thin
- promoting healthy weight management through a combination of healthy eating, enjoyable physical activity and positive body image versus fad diets and/or excessive exercising

Although the value of early detection is recognized, there was concern that widespread awareness campaigns or education focusing on the signs and symptoms of eating disorders could result in some adolescents deciding that purging is the easy way to lose weight. Long-term detrimental health consequences are not usually as important to adolescents as the immediate perceived "benefits", e.g. of eating chocolate sundaes and not gaining weight. Obviously particular situations call for more specific information but the overall emphasis in prevention should be on helping, without the possibility of doing harm; that is on the basic messages given above.

With these principles in mind, there are a number of positive things already underway which support the prevention of eating disorders; in particular:

- For several years, experts from across Canada have met to discuss the healthy weight issue. The Federal Health Services and Promotion Branch and Fitness Canada have recently produced a Blueprint for Action on "The Integrated Approach" which is a combination of healthy eating, enjoyable physical activity and positive body image leading to physical, mental and social well-being. The focus will be on the relationship among the components and on the interaction of the individual and his environment which affect eating, activity and body image. Five projects will be initiated this year and next, including a public awareness campaign. Many resources and ideas being developed will be available across the country.

...2/

- The Family Life curriculum presently mandated in grades 7-12 throughout the province includes lessons on positive self-esteem and body image, eating disorders and the effect of media on self-image. Eventually these lessons will be integrated into the broad-based health curriculum for elementary and secondary schools which is being developed by the Ministry of Education in cooperation with the Ministry of Health and a large number of representatives from community and health-related organizations. In line with the Sullivan report recommendations, health education will be part of the new Humanities curriculum. The primary level (K-3) will be introduced into a number of schools in early 1990. Again, positive self-esteem, acceptance of differences, awareness of socio-cultural influences on health and self-image and positive health behaviours are all essential aspects of the curriculum.

- The Ministry of Health has developed "Healthy Connections", a resource kit and planning guide to help interested community participants plan and carry out local activities which promote the health of children, youth and families, and support the school health curriculum. In early 1990, the kit will be used to initiate community discussion and action on the priority health issues identified by community members.

- The provincial nutritionists teach or liaise with sports groups, schools, other health professionals, worksites, counsellors, weight loss groups and mental health centers to help prevent eating disorders. Nutrition counselling of pre-pregnant, pregnant and lactating women has also reinforced the healthy weight message. The nutritionists are actively involved in the promotion of health through the various media channels and have developed and/or have access to a variety of resources on healthy weights, positive body image, healthy weight reduction and so on.

- National organizations such as the Bulimia and Anorexia Nervosa Association (University of Windsor) and the National Eating Disorders Information Centre (Toronto General Hospital) are continually developing resources for the prevention of eating disorders. For instance both organizations have newsletters and excellent resource kits for teachers.

Input from a number of nutritionists produced the following suggestions for preventive action. They are not listed in priority order because situations differ so widely throughout the province:

- Target coaches, teachers, parents, health professionals and other educators of children regarding basic prevention messages outlined earlier, an awareness of their own weight biases, community resources, etc. It is important to be conscious of other target groups, e.g. mothers on fad diets, males pressuring girl friends or wives regarding slimness.

...3/

- Increase awareness of these issues in undergraduate education of health professionals.

- Explore innovative ways to teach children tolerance and assertiveness, e.g. use of drama, school survey on health attitudes and practices to raise awareness.

- Distribute education kits and compile a resource directory, in order to support the prevention of eating disorders. The nutritionists have used many excellent books, videos, kits.

- Expand Dial-A-Dietitian, currently serving the Vancouver area only, to province-wide ("800" number), as an access for information on healthy weights, weight reduction, resources.

- Connect with the media to increase their own awareness of the issues. Encourage them to include prevention messages and choose media personalities with "healthy" bodies. Present prizes to advertisers for portraying healthy images.

- Support research to develop healthy weight guidelines for children and adolescents, similar to the BMI for adults.

Nutrition Services Department,
Victoria General Hospital,
35 Helmcken Road,
Victoria, B.C.
V8Z 6R5

August 2, 1989

Dr. Roger Tonkin,
McCreary Foundation,
3644 Slocan Street,
Vancouver, B.C.
V5M 3S8

Dear Dr. Tonkin:

The enclosed document is submitted in hopes that it will assist the task force on eating disorders when formulating their proposal to the provincial government.

The Victoria area does offer a range of counselling options, generally fee for service, for those with eating disorders. It is difficult, however to connect the patient and appropriate therapy; this reality often delays or prevents adequate treatment.

Victoria has a fledgling ANAD group which is attempting to fill a community support role. To be effective, ANAD requires professional support and direction.

Major concerns are bridging the gap between diagnosis and treatment and assuring the provision of multidisciplinary counselling in both in and outpatient care. The proposed Assessment Clinic would function as a single entry referral "clearing house" with additional responsibilities for community outreach. The proposed residential program would provide multidisciplinary therapy under the coordination of a psychiatrist.

The Assessment Clinic and residential programs would be most appropriately placed in a non-institutional setting. Proximity to bus routes and recreation facilities would be ideal and allow easy access to work, school and leisure activities.

...continued

There will soon be space in Saint Annes Academy (? commercial space), Fairfield Health Centre (geriatric) and Aberdeen Lodge (geriatric) which could house a centre. None of these settings is entirely suitable. A separate home would be preferable.

A consensus of opinion in our discussions was that because of our community focus the Assessment Clinic/residential programs would be most logically placed under auspices of the Capital Regional District or administered as a separate society.

Thank you for considering our comments. We are looking forward to your report and eventually to an Eating Disorders Program in Victoria.

Yours sincerely,

Eileen Carolan

Eileen Carolan, R.D.N.

ON BEHALF OF:

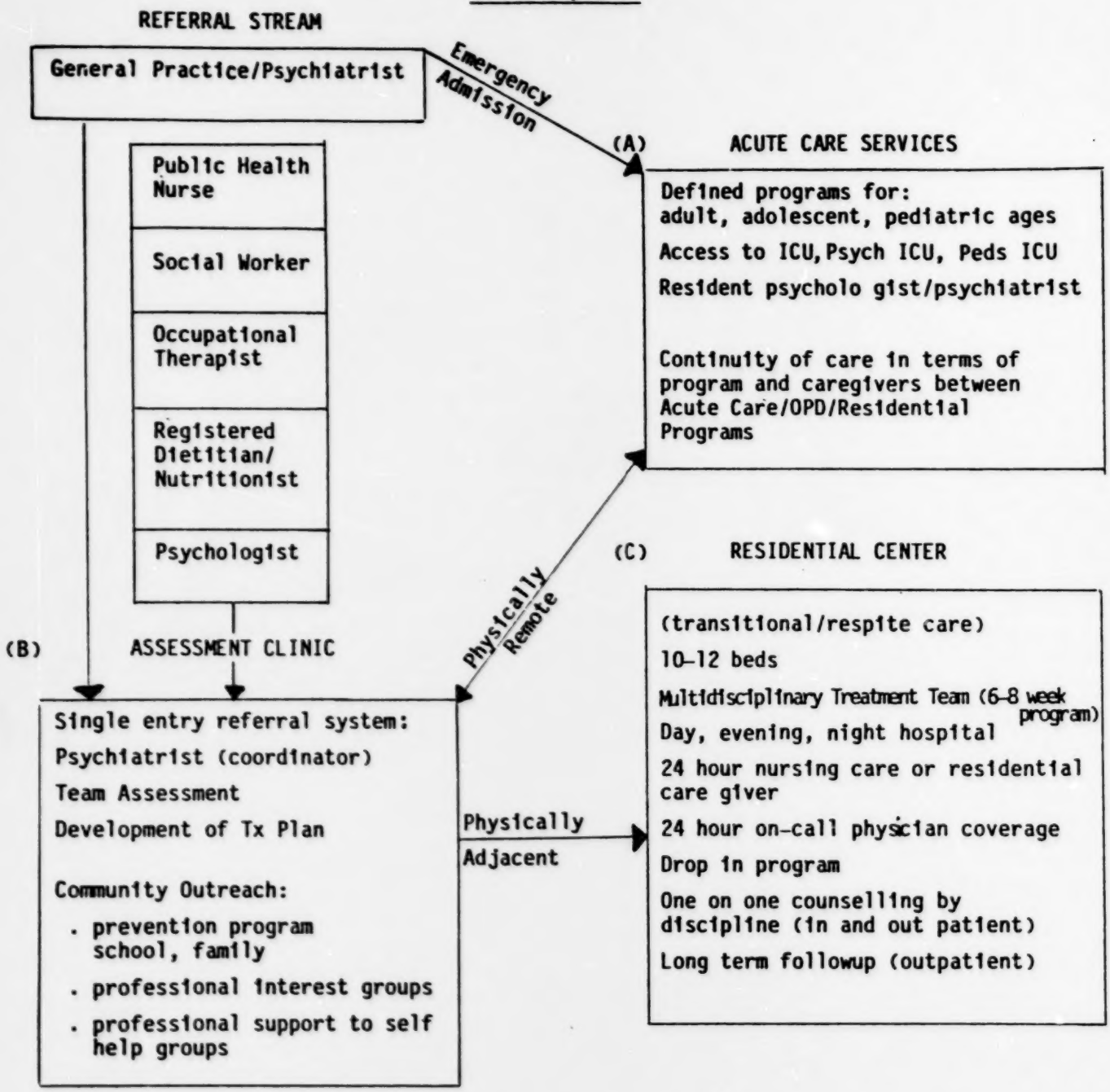
Dr. J. Arnason, M.D.
Eileen Carolan, R.D.N.
Helen Dubas, R.D.N.
Dr. I. Gillespie, M.D.
Heather Hermansen, O.T.
Dr. J. Kirkpatrick, M.D.
Linda Kristien, O.T.
Dianne Lawson, S.W.
Elizabeth McLelen, R.D.N.
Joyce Schnetzler, R.D.N.
Lucie Wood, R.N.

EC/bc
cc: E. Carolan

encl./

PROPOSED EATING DISORDER SERVICES

VICTORIA, B.C.



August 1, 1989

PROPOSED EATING DISORDER SERVICES IN VICTORIA, B.C.

PURPOSE: **A program providing multidisciplinary services to assess, activate and restore the eating disorder patient to his/her optimum level of functioning.**

A. ACUTE CARE SERVICES

a) Emergency admissions to hospital.

b) Defined programs preferably within one central hospital location.

c) Adult, adolescent and pediatric programs.

d) Access to ICU, Psychiatric ICU, Pediatric ICU.

e) Symptomatic management in order to initiate nutrition intake (feed) and stabilize severe/acute restricting behaviour.

f) Preliminary psychological management.

g) Multidisciplinary team approach.

B. ASSESSMENT CLINIC

a) Used as single entry referral center where patients are assessed and channelled into appropriate care.

b) Referrals accepted from General Practitioners, Psychiatrists, Public Health Nurses, Social Workers, Occupational Therapists, Registered Dietitian/Nutritionists and Psychologists. Professional assessment of persons making requests for service on a walk-in/phone-in basis.

c) Assessment team as follows:

- coordinator - psychiatrist, general practitioner, social worker, registered dietitian/nutritionist, registered nurse, occupational therapist, psychologist/therapist.

d) Preventive program via community outreach.

e) Clinic will be the major source of education material and education seminars for the CRD and for possibly the whole island.

f) Assessment Clinic to be physically adjacent to residential care facility.

g) Individual offices and facility for group counselling.

C. RESIDENTIAL CARE

a) 6-8 week multidisciplinary program for in and out patients. Day/evening program to offer one on one counselling and group therapy.

b) 10-12 inpatient beds in a residential home.

c) 24 hour nursing or residential care.

d) 24 hour on call physician coverage.

e) Proposed location - Fairfield to downtown area, close to major bus routes, education facilities, work, medical facilities and medical offices.

f) Treatment team: Psychiatrist, general practitioner, psychologist, social worker, dietitian/nutritionist, registered nurse, occupational therapist and recreation therapist.

g) Drop-in services for patients in crisis along with hot line.

August 1, 1989

Compiled by:

Dr. J. Arnason, M.D. - General Practice
Eileen Carolan, RDN. - Outpatient Counselling
Helen Dubas, RDN. - Pediatric Specialty
Dr. I. Gillespie, M.D. - Psychiatrist
Heather Hermansen, O.T. - Psychiatry
Dr. J. Kirkpatrick, M.D. - General Practice
Linda Kristien, O.T. - Psychiatry
Dianne Lawson, S.W. - Psychiatry
Elizabeth McLelen, RDN. - Public Health
Joyce Schnetzler, RDN. - Psychiatric inpatient counselling
Lucie Wood, R.N. - Psychiatry

NUTRITION SERVICES (CLINICAL)

- on both in and outpatient basis

1. Nutritional assessment: Initial and ongoing -including anthropometrics, diet history and establishment of goal weight.

2. Symptom management: Recommendation of calorie level, menu selection, tube feeding, resource person to nursing staff.

3. Nutrition Counselling in individual or Group sessions:

   -education on: effects of starvation/normal nutrition/ appropriate food selection

   introduction of forbidden foods

   food falacies

   weight management

   exercise routines

   grocery shopping

   meal planning

   restaurant meal selection

August 1, 1989

C.R.D. | MEMOrandum

TO : Helen Dubas, R.D.N., Nutrition Services
Victoria General Hospital

FROM : Liz McLelan, R.D.N., Preventive Nutrition
C.R.D Community Health Services

SUBJECT : PROVINCIAL EATING DISORDER TASK FORCE

DATE : July 26, 1989

FILE :

Thank you for inviting my input into the GVHS Committee's report to the Provincial Eating Disorder Task Force. I understand that a brief will also be submitted by the Community Nutritionists group, but am unable to ascertain what their suggestions are, due to our short time line.

I would like to recommend that in addition to the proposal for a residential treatment centre and out patient facilities, that a preventive component be developed. A preventive aspect would enhance the effectiveness of such a local "centre of excellence" on eating disorders.

The National Eating Disorder Information Centre at the Toronto General Hospital has recently published a "Teacher's Resource Kit" a teacher's lesson plan kit for the prevention of eating disorders. They are also involved in producing information materials for public distribution, printing a nation-wide listing of treatment services available, providing lectures to schools, community groups and professionals, publishing information on local Family Support Groups, sponsoring programs to normalize eating habits of overweight women, sponsoring Eating Disorder Awareness Week in Canada, and providing an information phone line.

Bulemia Anorexia Nervosa Association, Windsor, has published "A Preventive Curriculum for Anorexia Nervosa and Bulemia".

I believe preventive measures should be in accordance "Promoting Healthy Weights" Health and Welfare Canada, October 1988. Signs and symptoms of eating disorders should be de-emphasized in a preventive program.

Partners in a preventive component would need to include at least the Eating Disorders Centre (proposed), C.R.D. Community Health Services Nursing & Nutrition and School District Health Consultants/Ministry of Education.

I hope this information is helpful. I'm sorry I am not able to provide more concrete and well defined proposals at this time.

Liz McLelan

Liz McLelan, R.D.N.
Community Nutritionist

cc: Dr. P. Wolczuk
M. E. Strada
A. Carrow, Nutrition Branch, Ministry of Health

OCCUPATIONAL THERAPY SERVICES

- on both inpatient and outpatient basis
- provide individual assessments
- provide individual and group therapy as follows:

1. **Activation** (of acute inpatients)
   - motivation
   - early socialization
   - reality orientation

2. **Activities of Daily Living**
   - grooming and hygiene
   - meal planning and preparation
   - shopping
   - laundry and clothing care

3. **Daily Living Skills**
   - budgeting
   - wardrobe planning
   - decision making
   - goal setting
   - problem solving
   - prevocational skills (job readiness)
   - resume writing
   - money management
   - making changes

4. **Life Skills**
   - self-awareness
   - self-esteem and self-confidence
   - assertiveness training
   - communication skills
   - expression of feelings
   - stress management and relaxation

5. **Leisure Skills and Community Awareness**
   - socialization
   - leisure planning

Linda Kristien, O.T.

August 1, 1989

PHYSICIAN SERVICES

- **both psychiatrists and family practitioners will likely be employed on a sessional basis.**
- **the family physicians would provide services as follows:**

1) Daily rounds for monitoring of medical concerns of inpatients.

2) Medical management of eating disorder and non-eating disorder medical problems for inpatients.

3) Medical management, as in 2) above, but for outpatients.

4) Medical screening of new in and outpatients.

5) Assessment of acute patients after hours.

6) Triage patients for both medical and non-medical management by outside practitioners, (internists, pediatricians, surgeons, cardiologists, others).

7) Low to moderate level 'therapy' or counselling.

8) Will act as educator to patients, family, community, other physicians and others.

9) Will act as 'life line' or major significant other when opportunity presents itself.

10) 24 hour on-call service will be provided.

August 1, 1989

Appendix F

Inventory of Resources

I. Films

1. "Killing Us Softly: Advertising's Image of Women"
   28 min 16 mm 1979
   - produced by Cambridge Documentary Films
   - distributed by NFB of behalf of National Clearinghouse on Family Violence, Health & Welfare Canada

   A film on the psychological impact of advertising and the media's role in perpetuating a negative image of women.

2. "Thin Dreams"
   20 min 38 sec 16 mm and video NFB 1986

   How young women in high school feel about their bodies and how their self-images are affected by North American society's obsession and thinness.

3. "Dying to Be Perfect"
   27 min 16 mm video NFB 1989
   - distributed by Canadian Filmmakers Distribution West

   Two survivors speak of their battles with anorexia and bulimia and how it affected their lives today.

4. "Wasting Away - Identifying Anorexia and Bulimia"
   25 min video 1987
   - available through Kinetics Inc. Films, Toronto, Ontario
   - resources for patients, staff development on physical, nutritional and mental health aspects and complications
   - comes with teacher's guide

5. "Understanding Eating Disorders"
   50 min film
   - available from communication systems, University of Manitoba, Winnipeg
   - information on anorexia and bulimia, causes and treatment

6. Available from Carle Medical Communications Urbana, Illinois

   a) "Bulimia - the Binge/Purge Obsession"
      25 min film/video 1986
      information for college age women

   b) "Nursing Issues in Bulimia"
      video
      address nursing issues related to caring for patients with bulimia

c) "The Enigma of Anorexia Nervosa"
video
a three part program for nurses focusing on inpatient care

d) "Heavy Load"
video 1987
for and about overeaters/obesity

e) "Dark Secrets/Bright Victory"
video 1987
for high school/college age women on bulimia

II. Pamphlets, Booklets, Educational Material

1. Produced by National Eating Disorder Information Centre, Toronto General Hospital

   a) "Understanding and Overcoming an Eating Disorder: A Resource Kit for Those Who Suffer from Anorexia Nervosa or Bulimia Nervosa"
   September 1988 (booklet)

   b) "Eating Disorders: An Overview - A Comprehensive Look at Anorexia Nervosa and Bulimia Nervosa"
   September 1988 (booklet)

2. Produced by Surrey Community Services, Surrey, B.C.
   "Eating Disorders - Some Facts on Anorexia Nervosa and Bulimia"
   April 1988 (booklet)

3. Produced by ANRED (Anorexia Nervosa and Related Eating Disorders Inc.) "Anorexia Nervosa and Bulimia"
   February 1986 (booklet)
   - also has several papers, articles, newsletters

4. Produced by BANA (Bulimia Anorexia Nervosa Association - Can/Am)
   Psychological Services Centre, University of Windsor
   "A Preventive Curriculum for Anorexia Nervosa and Bulimia"
   - lesson plans and teaching aids for grades 7 - 12

III. Treatment Programs

Inpatient

B.C. Children's Hospital	Dr. R. Tonkin	434-3522
Kelowna General Hospital	Dr. P. Latimer	762-4000
St. Paul's Hospital	Dr. C.L. Birmingham	682-2344
	Dr. L. Day	682-2344
University Hospital - UBC Site	Dr. E. Goldner	228-7657
	Dr. L. Cockhill	228-7657

Day Programs

Delta Mental Health	Mr. E. Wigmore	660-8966
St. Paul's Hospital	Dr. B. Morris	682-2344
Kelowna General Hospital	Dr. P. Latimer	762-4000
UBC Day House	Ms. V. Kaneva	228-2312

Outpatient Clinics

Anorexia/Bulimia Clinic	Dr. L. Solyom	872-7880
B.C. Children's Hospital Youth Clinic	Dr. R. Tonkin	434-3522
Kelowna General Hospital, Eating Disorder Program	Dr. P. Latimer	762-4000
St. Paul's Hospital, Eating Disorder Clinic	Dr. B. Morris	682-2344
Vancouver Eating Disorder Clinic	Dr. M.F. Elterman	222-4057
	Dr. R. Manley	875-2345
University Hospital - UBC Site	Dr. E. Goldner	228-7657
University of Victoria, Counselling	M.J. McLachlan	721-8341

Private Practitioners

Courtenay	Ms. S. Lazare	338-9241
Kelowna	Dr. P. Latimer	861-7741
Powell River	Dr. R. Uhlmann	483-2230
Vancouver	Dr. C. Brouillette	987-2833
	Dr. G.J. Cochrane	263-3312
	Dr. M.F. Elterman	222-4057
	Ms. S. Friedman	736-7180
	Dr. E. Goldner	228-7657
	Dr. C. Hawes	922-9186
	Dr. R. Hawes	467-4166
	Ms. B. McLagan	875-6345
	Dr. R. Manley	222-4057
	Ms. Doris Maranda	736-7180
	Dr. B. Morris	682-2344
	Ms. T. Silverton	875-6345
	Dr. L. Solyom	872-7880
	Dr. L. Tyhurst	266-9131

Support Groups

ANAD (Anorexia Nervosa and Associated Disorders)	Ms. B. McLagan	875-9690
	Ms. T. Silverton	875-9690
Parent Support Group Youth Clinic	Mr. K. Elliott	872-7880
St. Paul's Hospital Eating Disorder Group	Dr. B. Morris	685-2344